

## The Use of Literacy Materials in Early Childhood English Language and Literacy Programmes in Singapore: Local Responses to Global Trends

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This paper explores local responses by Singapore pre-school teachers to the global trend towards English as the medium of instruction at the early childhood level of education. The paper reports research into how teachers have responded to the national literacy agenda, as outlined in the Curriculum Framework for Kindergartens in Singapore, using literacy materials in an early childhood English 'literacy adoption' programme over a period of one year. The study identified three interrelated and interdependent dimensions of influences on teachers' use of literacy materials: choice of literacy materials; teacher beliefs and experience; and the literacy environment of the learner.

## Introduction

The global trend towards English medium instruction in South East Asia highlights the increasing importance of early English literacy education as a foundation for success in school. This paper addresses responses from Singapore's pre-school sector to global developments in early childhood English language and literacy education. According to Ratna (2012, p. 19), "values associated with globalisation privilege academic success and consequently increase the pressure to learn English as the global *lingua franca*". In Singapore, this is evident from the very early levels of

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education, where parents want their children to attend Englishmedium pre-school (Kennedy, 2006). Pre-school education in Singapore includes both the childcare and kindergarten sectors. Singapore's pre-school teachers are charged with preparing their students for a formal compulsory education conducted primarily in English (Lim & Torr, 2008).

Singapore's childcare centres and kindergartens are private schools that provide early years programmes before children begin primary school in the year they turn seven. Childcare centres offer programmes for children between 18 months and seven years of age. These centres operate for full days and provide programmes for the education, management and care of children. Kindergartens provide a structured three-year education consisting of Nursery, Kindergarten 1 and Kindergarten 2 for children from four to six years of age. Ang (2012) reports that almost all children commencing primary school in Singapore have attended at least one year of pre-school at either childcare centre or kindergarten.

Under Singapore's education policy of bilingualism from preschool to secondary school, English is the main medium of instruction, with most students also taking one of the three official Mother Tongue subjects: Malay, Tamil or standard Mandarin. Many children entering their first year of primary school come from homes where English is commonly used. The 2010 Singapore Census of Population found that English was the most frequently spoken language at home for nearly 30 per cent of the population aged five years and over. It was also found that English was more generally the home language among the younger age groups than the older age groups, with English being the home language for 52 per cent of Chinese, 50 per cent of Indians, and 26 per cent of Malays aged five to 14 years (Department of Statistics Singapore, 2011).

The Early Childhood and Development Agency (ECDA), an autonomous agency of the Ministry of Social and Family Development (MSF), serves as the regulatory and developmental authority for the early childhood sector in Singapore. Established in 2013, the ECDA is jointly overseen by the MSF and the Ministry of Education (MOE). The agency is responsible for overseeing the regulation and development of kindergarten and child and infant care programmes for children below the age of seven, facilitating the training and development of early childhood educators and conducting public outreach activities for parents to learn about their child's early development (MOE, 2013).

MOE is responsible for registering and monitoring standards of kindergartens and their teachers (MOE, 2012). It provides curriculum guidelines for kindergartens, which maintain their own goals and philosophies. Nurturing Early Learners: A Curriculum Framework for Kindergartens in Singapore, launched in 2003, resulted in a new pre-school experience for teachers preparing children for life-long learning, with the aim of promoting a love for learning (Ministry of Education, 2003). Revised in 2012, the kindergarten framework fosters holistic development that emphasises opportunities for maximising provision for purposeful play. It emphasises the integration of knowledge and skills to facilitate concept development, oral language and basic skills required for literacy, maths, science, social skills and environmental awareness and creative activities. The framework ensures that children attain eight 'desired outcomes' by the end of their pre-school education. These outcomes are to be acquired through experiences in six critical areas of learning, namely: Aesthetics and Creative Expression; Discovery of the World; Language and Literacy; Motor Skills Development; Numeracy; and Social and Emotional Development (MOE, 2012).

MOE advocates for children's language and literacy learning to be integrated within meaningful contexts where effective learning involves giving children opportunities to speak and listen, use language and literacy to represent ideas and thoughts, and be immersed in a language-rich environment. Effective teaching in language and literacy development involves valuing children's talk and modelling the use of language as a tool for communicating and thinking. A key learning goal from the Language and Literacy area of the kindergarten curriculum

framework is for children to read with understanding and for enjoyment. According to the framework:

Children need opportunities to develop early literacy skills so that they can learn to read and write and to make meaning of texts. Their interest in books and reading is built when they are given choices from a wide range of reading materials (MOE, 2012, p. 80).

The Ministry's literacy agenda in this regard is to recommend and encourage children to experience many types of books and be exposed to a variety of text types.

Pre-schools have the autonomy to form their own curriculum, pedagogy and individual programmes, including literacy progammes. Therefore, as Ang (2012) explains, there is much diversity in the types of learning experiences provided by preschools; "Some kindergartens, for instance, offer a programme that emphasises literacy and numeracy while others offer a more play-based curriculum that veers away from any academic focus" (p. 39).

The research reported in this paper investigated how pre-school teachers in Singapore responded to the Ministry's literacy agenda, as outlined in the *Curriculum Framework for Kindergartens in Singapore*, through the use of literacy materials in early childhood English literacy programmes over a period of one year. The focus was on teachers using literacy adoption programmes as the foundation for reading and writing instruction in the pre-school curriculum. Within the context of this research, a 'literacy adoption programme used by teachers as the foundation for reading and writing instruction in the pre-school curriculum.

Literacy adoption programmes in Singapore schools have been implemented mostly at the primary school level. In September 2005, MOE set up the English Language Curriculum and Pedagogy Review Committee to study how English Language was being taught in schools. The target of the Committee was "to ensure that every student is equipped with the English language competency and skills needed for learning, for work and for life in a global economy" (MOE, 2006, p. 5). The findings of the review resulted in the implementation of a literacy programme in primary schools, called Strategies for Effective and Engaged Development in English Language (SEED-EL). The SEED-EL programme aimed to develop a love for reading in children through early exposure to story books (MOE, 2006). However, early childhood theories indicate that children are capable of acquiring literacy skills at a much younger age than the primary school starting age of seven. The time from birth to five years is the fastest language learning period in children's lives, where they experience tremendous cognitive and language development (Montessori, 1995; Clay, 1998; Berk, 2001; Winch at al, 2001; Goh & Silver, 2004; Morrow, 2005).

Although MOE did not advocate for a structured programme such as SEED-EL for pre-schools, many of them have implemented similar literacy programmes using a variety of materials and strategies. The critical appraisal and selective use of literacy materials is an integral part of literacy development because it can help or hinder the process of learning to read. Thus, teachers can provide a literacy environment, not only in the physical setting, but also of rich resource materials with which to scaffold children's literacy experiences.

## Language and literacy development in early childhood

The theoretical perspective on language and literacy development taken in the study to be reported follows that of Morrow (2005), who takes a balanced approach to early literacy instruction through a blend of ideas that involve problem-solving techniques with explicit direct instructions by the teacher. Morrow's approach merges the art of teaching, which concentrates on human variables, with the science of teaching, which involves theories based on research findings. Morrow (2005) purports that play in early childhood provides opportunities for young children to problem solve, acquire new knowledge, role-play real-life

situations, and cope with situations of sharing and cooperating, all of which foster language and literacy development.

Literacy learning begins long before children attend pre-school (Cheah & Gan, 1998; Clay, 1998; Winch, et al., 2001; Gan, 2002; Morrow, 2005). Teachers build on this foundation during literacy instruction. The literacy environment helps children make connections between what they already know and the new knowledge and concepts to be acquired. Both the home and school environment play a critical role in the language and literacy development of children. The quality of conversation between children and their peers, as well as between children and their teachers, is critical to language and literacy development (Berk, 2001; Gan, 2002; Saravanan & Sripathy, 2002; Doyle, Goh & Zhang, 2004; Heisner, 2005; Morrow, 2005).

A literacy-rich physical environment supports early literacy development (Winch, et al., 2001; Gan, 2002; Morrow, 2005). The physical design affects children's choice of activities. Research affirms the importance of early literacy experiences where children's appreciation of and interest in print develops in response to the models provided in the environment. The richer and more nurturing the literacy environment, the more likely children are to explore language and print. Literacy-rich classrooms use functional print to communicate information (Morrow, 2005). A 'literacy centre', or dedicated area for specific reading and writing activities, is part of the literacy environment and requires clearly defined tasks of varying developmental levels to cater to children's diverse learning needs (Morrow, 2005). Knowing the nature, strengths and weaknesses of an environment and the activities in it helps to inform teachers in making changes in the design as well as instruction and interaction within that environment, in order to advance children's language development (Olds, 2001; Heisner, 2005).

According to Morrow (2005), teachers function most effectively with strategies they are most comfortable with. She states that teachers need to be decision makers who will think critically about

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the design of their literacy programme and the selection of materials. This means that teachers need to be well-informed and reflective professionals rather than merely managers of time and lessons. Teachers ought to consider their beliefs about the value of literacy and the nature of teaching and learning literacy because these influence their decisions pertaining to the literacy environment.

Children enter pre-schools with different prior exposures to language. In pre-school they experience: shared book reading; listening to audio equipment; talking through retelling; role-play and dramatization to depict characters from favourite stories; shared and guided reading; modelled and shared writing; language experience approaches; and other literacy activities (Chen, 2002; Gan, 2002; Heisner, 2005). Children learn oral or written language by using it in authentic literacy events that meet their needs (Chen, 2002).

Books are the basis of an early reading programme or early childhood curriculum and a major influence in motivating children to read. Children's literature plays an essential role in the Singapore pre-school curriculum (Gan, 2002). It facilitates the discussion of themes, which provide continuity and integration to the curriculum for its holistic purposes (MOE, 2012). Children's literature serves as a model to support language learning (Morrow, 2005). According to Gan (2002), language and literacy practices in Singapore pre-schools subscribe to three influences, namely: (1) a language-rich environment; (2) an effective teacher who values and models language conversations and literacy strategies; and (3) the provision of a variety of children's literature.

In summary, the research literature emphasises the important role of the teacher in influencing early literacy development through: (1) planning and influencing the environment; (2) selecting the literacy materials; and (3) using appropriate strategies and instructions while conducting a literacy lesson. These activities have a compounding impact on determining whether children's language and literacy development will be enhanced or delayed. The literature also suggests that literacy materials affect both how teachers plan the literacy environment and the instructional strategies they employ.

## The research project

The qualitative research study adopted a constructivist grounded theory approach in order to "seek data, describe observed events, answer fundamental questions about what is happening then develop theoretical categories to understand it" (Charmaz, 2006, p. 25). Grounded theory methodology is flexible and offers an ordered and organised approach to data collection and analysis. This open-ended and yet rigorous procedure allowed systematic checks to be built into both data collection and analysis by going back to the data and forward into the analysis, and returning to the field to gather more data to refine the emerging theoretical framework. The research investigated how and why pre-school teachers construct meanings and actions in specific situations in the context of literacy adoption programmes. It followed the process of theoretical sampling, which involves constructing tentative ideas about data and examining these ideas through further empirical inquiry (Charmaz, 2006).

A total of 74 teachers from a range of pre-schools in Singapore that adopt literacy programmes participated in the study. A variety of programmes was represented. Some participants were from the same pre-school but teaching different age groups. Teachers used their school's English literacy programme as the foundation for reading and writing instruction in the pre-school curriculum. In each pre-school the literacy programme had a prescribed set of books that was part of or integrated into the curriculum. Each programme involved a sequence of prioritised objectives and explicit strategies that support children's literacy development and learning. The prescribed books typically came with teaching guides for teachers and activity sheets or worksheets for children to consolidate learning on each book. The adoption of the prescribed books did not prevent the use of other materials and strategies to foster a rich and comprehensive literacy programme. Data was gathered primarily though semi-structured individual and group interviews and classroom observations over one school year. Supporting data included the researcher's diary and participants' journal entries and written questionnaire responses. Informal interviews and surveys were also used to gather follow up data on emergent themes. Data analysis followed three main steps: (1) finding conceptual categories in the data at a first level of abstraction; (2) identifying relationships between these categories; and (3) conceptualising and accounting for these relationships at a higher level of abstraction (Punch, 2005). A narrative approach (Moen, 2006) was used to construct vignettes of participants who were found to exemplify characteristics typical of the broader sample. The empirical and theoretical findings are presented below.

## Findings

The research findings are presented in three sections. The first section describes the literacy curriculum and literacy adoption programme in one pre-school and the narrative vignettes of two teachers from the school. The vignettes provide the teachers' perspectives on literacy materials and their experiences of using literacy materials within the pre-school literacy programme. Issues addressed include, for example, influences on the choice of literacy materials, the role of an early literacy teacher, individual classroom practices, and the 'essential' literacy environment. The individual vignettes draw attention to the diversity of the teaching environment and to differences in teacher's beliefs, experiences and perspectives with regard to the use of literacy materials. However, there are significant similarities that are consistent across the vast majority of the full sample of research participants. The second section therefore draws on commonalities across the experiences of all participants with the construction of a 'storyline' (Strauss & Corbin, 1990) or composite account of participants' experiences. The third section presents the theoretical findings of the study in the form of three dimensions of influences on pre-school teachers' use of literacy materials.

# The Literacy Curriculum and Literacy Adoption Programme in One Pre-school

The teacher participants described in the following vignettes were teaching in the same pre-school, a private childcare centre located in suburban Singapore. The parent body is made up of professionals, managers, executives and business owners. The children in this childcare centre mostly come from families with middle and above household income. The centre is managed by the Director and the Centre Manager. It has a principal and 12 teachers. The curriculum provides for individual differences, interests and abilities, and emphasises family involvement and collaboration in the children's learning. The stated curriculum objectives are to produce children with inquiring minds, who are motivated to learn and who want to know how to find answers for themselves. The curriculum provides guidelines to conduct at least one project related to the school's "topic" for each school term of three months, for all four terms in the academic year for each level group. The guidelines include daily lesson plans and processes for teachers to deliver their lessons, with provision for variations that might evolve through the interaction among children and teacher. Worksheets are provided to help consolidate children's learning. Activity sheets for assessing individual or group work are also provided.

Within the curriculum, there are prescribed readers for each level group. Typically, the management selects the materials and then consults some senior and more experienced teachers before making the final decision. For Nursery to Kindergarten 2 children the literacy adoption programme requires that 20 prescribed readers are adopted and integrated into the curriculum each academic year. The programme uses graded non-fiction readers that integrate science, social studies and maths content within literacy development. Children are exposed to a wide array of text features, graphic elements, organisation patterns and non-fiction genres. The readers aim to provide children with the challenges they need to develop and practice key reading skills and strategies.

The readers also aim to develop English literacy skills as they introduce children to new topics and knowledge through their photographic illustrations and specific formats that provide rich and varied vocabulary, ranging from high-frequency words to specialised content-specific vocabulary. The publisher provides teaching guides and worksheets for teachers to carry out lessons using each of the readers that relate to the content and/or concept for each reader.

The readers and worksheets are integrated into the centre's curriculum according to the "topic" or "theme" of enquiry for the term. According to the curriculum guidelines, the basis of the literacy curriculum and the strategies employed in using the prescribed readers is that children experience a variety of reading and writing practices through the use of these materials. They listen to each other read, read with help from the teacher, read with other children and eventually read independently. The books are used for guided, shared and independent reading and writing. They also serve as models for shared writing. Children acquire creative writing skills, whereby they learn to write for a purpose such as writing to inform, present and document.

Member's the centre's management team gave the following reasons for prescribing the set of readers:

- 1. The readers are graded and levelled.
- 2. The readers develop children's key reading skills and strategies.
- 3. The readers integrate science, social studies and numeracy with literacy.
- 4. The readers have strong text support that enriches children's vocabulary and knowledge about the world.
- 5. Each reader is accompanied with worksheets for meaningful reinforcement and consolidation work.
- 6. The readers complement the centre's curriculum and are fully integrated with it.

*Vignette One – Nursery Teacher.* Vignette One portrays a teacher teaching four-year old or nursery children. The classroom has a display wall full of children's artefacts and teacher's charts and labels including the alphabet and numbers. A designated 'literacy' area on the adjacent wall is a bulletin board where the teacher displays previously shown picture and word cards and a book holder displaying multiple copies of the adopted readers for the literacy programme. Each reader shows the name of the child it "belongs to". Children's belongings are kept in cubbies labelled with their respective names. The teacher agrees with the management's decision on the choice of readers as she has witnessed her children's positive engagement with these texts over the previous year. Children seem to like the books and enjoy reading them.

The teacher uses the reader as a basis for learning whereby she branches out from the content in the reader and extends activities related to it. She introduces the book using concrete materials or real objects. She does "show and tell" where, firstly, she shows the object to the children and then discusses it, for example, naming, describing or demonstrating how to make use of it. In using the book for literacy instruction, she engages the children in talking about the pictures in the book, or what she calls "picture talk". She prompts and asks children to talk about what they see in the book and encourages them to discuss their experiences in relation to what they see. As she goes through the book, she asks children to predict what might happen next and perhaps what might happen in the end. She believes that it is important for children to speak out and discuss their thoughts with their friends. Next, she exposes them to the concept of print and book knowledge. She prepares and prints word cards with pictures to help children recognize a word and associate it to the correct picture.

The teacher believes that training for teachers is important to support the use of literacy materials. She believes that literacy material should be "age appropriate"; for nursery age children this means having simple and repetitive texts that allow children to point to pictures and words as they read. For this teacher, the most important indicator of a successful literacy programme is when children understand what they read in the book. In her opinion, nursery children should be given ample opportunities to speak out so as to develop oral language. Through picture talk, children are given opportunities to speak their mind and construct sentences. Through this activity, she also gathers prior knowledge about the children and about what they already know regarding the topic. This enables her to subsequently develop the children's vocabulary. For example, if children are unsure of the topic, she will introduce the relevant vocabulary through "show and tell". However, if children are aware of the topic, then she will develop their understanding of the vocabulary by modelling the use of relevant words and terms. Another way of assessing children's prior knowledge is to do a pre-reading activity such as documenting the content of the discussion or holding a brainstorming session with the class on a particular topic. In this way she observes children's oral language development regarding the way they contribute to the discussion and their use of vocabulary. This teacher had taught the same children in the previous year and could therefore attest to their progress in the use of vocabulary.

The teacher believes that understanding children's prior knowledge influences the teaching strategies she uses. For instance, she can build on their prior knowledge and advance her lessons instead of having to stay on a fixed lesson plan. However, if she finds that the children have no prior knowledge on the topic, she will carry out a teaching strategy that helps to build their knowledge progressively.

To this teacher, teaching strategy means ways to introduce something to children. Her objectives for the nursery children are, firstly, to have exposure to words, then to be able to recognize some words, to be able to read, to be able to write, and to be able to make sentences orally. Normally after reading a book, she puts up word cards on the board to encourage children to practice pointing to and reading the words so that they can recognise them in future. This teacher finds that her nursery children engage in

some form of learning or reading strategies when they are able to point to the word and read.

*Vignette Two – Kindergarten Teacher*. The teacher described in this vignette teaches six-year old or Kindergarten 2 children. The classroom has varied, progressive displays of children's artefacts and teacher's documentation on discussions and contributions from various lessons with the children. Displays include labels, environmental print and, predominantly, children's artwork and project work. There is also a display panel of sight words that children have learned and which are available for children to work with during literacy lessons. Copies of the prescribed readers for the literacy programme are displayed in book holders against the wall at child height for easy access. In addition, writing materials and resources are available on the shelves.

The set of adopted readers in this class is part of a non-fiction literacy programme that provides vivid visuals for children using full photographic illustrations and which covers a wide range of topics that align with the learning objectives of the centre's curriculum. According to this teacher, the readers cover science topics to build and extend general knowledge; such topics help children relate to daily life issues and hence develop practical knowledge and skills. She is of the view that the management of the centre, in view of their qualifications and experience as preschool educators, should make the decision regarding the selection of literacy materials. However, when selecting additional literacy materials for her class she chooses according to the theme or project in the curriculum because she was "trained to do so", and thinks that this is appropriate.

This teacher values the importance of hands-on learning and emphasises the practical application of knowledge acquired through reading the text to the children's daily life experiences. Her choice of literacy material is preferably related to practical life and self-help skills where hands-on skills develop as children practice. In this way, children are able to relate to their daily experiences, an approach she considers developmentally apposite.

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For instance, in the book 'Cooking Dinner' she engaged the children engaged in a cookery lesson where they cooked fried rice after the introduction and reading of the book. Through this extended activity, children learned about the names of the utensils and ingredients required to cook fried rice, thus building vocabulary.

A successful literacy programme for this teacher means that children are able to understand what they read. She considers her experience using the prescribed readers to be successful. Every reader has a "think and discuss" question on the back cover of the book, which allows pre-reading discussion and brainstorming. She believes that this is "where learning begins, when children come up with a lot of questions and try to predict what the book might be about". Together with picture talk, where children discuss the title of the book and what they see on the cover page and move into the contents and illustrations in the book, they understand the contents in the book. An indicator of success to this teacher is when children not only know and understand the content in the book, but are also able to make use of the knowledge acquired from the book and apply it to their daily lives. This teacher often plays the role of a facilitator whereby help and explanation are given only upon request from children.

On the introduction of a new book, this teacher first of all encourages sensorial, concrete and hands-on activities. She then proceeds to word building activities such as discussing the spelling of words, writing these words and reading aloud to foster phonemic awareness. She makes and uses word cards to teach recognition and spelling of high-frequency words. In this manner, children not only learn the word by sight, but also in isolation and in context for future use such as in constructing their own sentences. Phonics is taught incidentally in her class through analytic phonics. In fact, most of the children in this class attend enrichment classes, including phonics, apart from the regular preschool education in the centre.

This teacher tries to ensure that her children learn the 100 most frequently used words from her centre's curriculum sight word list. Together with the vocabulary or content words from the prescribed readers, she encourages children to construct sentences in preparation for composition writing and simple comprehension which will happen in the last term of the academic year. To her, the objectives of language and literacy development are to learn to read and then write, from simple words to sentence construction. The Ministry's literacy agenda to her means the 'basics' of reading and writing for children.

In addition, she believes that the teacher is an influence to the success of a literacy programme, and that pre-service and inservice training in implementing literacy programmes is necessary. She cites three important influences on the success of a literacy programme: the teacher as role model in the correct use of standard English; the provision of teaching aids such as books that are print rich with clear illustrations; and the cultural environment of the learner.

One of the teacher's main strategies for using the readers is to get children to point to the words in the book. Her objective is to help children recognise the word through one-to-one correspondence. Another strategy for word recognition is to have children work in pairs to find words for each other to read using the prescribed readers. She gathers information on children's prior knowledge on the topic of interest during the initial discussion and then documents the discussion with children onto a chart, often in a form of a web. The web is developed through extending the topic of interest via cooperative learning and brainstorming with children.

## The Storyline

According to the participants in this study, the objectives of a literacy curriculum for pre-school children should be for children to:

- 1. have an early exposure to language development;
- 2. be able to understand concepts of print;
- 3. be able to comprehend or make meaning out of print;
- 4. be able to read before their admission to primary school;
- 5. be able to read fluently and write creatively; and
- 6. be independent readers.

Singapore pre-school teachers use a variety of materials for literacy programmes apart from the prescribed readers, such as audio CDs with songs and/or rhymes, interactive CD-ROMs, posters with pictures and words, charts, labels, story books, and activity sheets, 'big books', flashcards and word cards in relation to the words in the book being introduced. Materials are either self made or commercially available.

Teachers believe that books for children should be developmentally appropriate, challenging, enticing, interesting, and current. Teachers look for age appropriate texts, suitable for children to attempt reading on their own. Most are of the view that books should challenge children to have the confidence to "pick up reading skills", and should also challenge them in other areas such as language acquisition.

Teaching strategy is generally understood by teachers as "meaningful" teaching with customised lessons and different types of teaching methods to meet the diverse learning needs of the children. Teachers believe that children's prior knowledge influences their teaching strategies, and can contribute to, interrupt or impede lessons. Prior knowledge on a topic can be elicited before and during reading activities and also through constant observation of their learning behaviours.

Teachers typically conduct a pre-reading, or "tuning in", activity to engage children and prepare them for the reading activities to follow, such as brainstorming, discussion, re-reading of familiar text, and the introduction of a new book. Introducing a new book

allows the teacher to discuss, highlight and/or teach concepts related to the book and its contents. Teachers often discuss and talk about the pictures on the cover and throughout the book, and encourage children to predict, explain, and reason in relation to the content of the book or story.

Teachers employ various strategies such as guided reading, reading aloud, peer reading and small group reading. Post-reading activities include reflecting on the book or story and language acquisition activities where children are encouraged to share what they like and/or dislike about the book or the story. Teachers assess children's book knowledge or story comprehension through open-ended questioning. They concentrate on word building activities, writing activities and extension activities to foster language acquisition. Follow up activities, such as worksheets, are helpful to reinforce and consolidate learning. Extension may be in the form of expanding on the original story, replacing a scene and/or setting in the text, or the whole class coming up with a new story based on the original.

Teachers feel that the materials used in a literacy programme are important to ensure success. Factors of influence to ensure a successful programme also include how these materials are being used by the teachers and reinforced by the literacy environment. Some teachers attest to the importance of training in implementing the programme. Some see the need for regular professional development to upgrade and improve their skills in the strategic use of literacy resources and materials. Others think that the collaborative sharing of ideas among teachers is important to expose them to other methods of teaching and/or teaching strategies.

Teachers strongly believe that parental involvement and the home environment are contributing factors to the overall literacy environment, and also indirect factors of influence to a successful literacy programme. Generally, teachers agree that parental involvement reinforces what children learn in school. Most teachers concur that there is a need for consistency and continuation between what the children learn at home and in school. They believe that "early literacy begins at home". To this end, teachers see the importance of sending the prescribed books home for parents to read with their children. Teachers normally work with the children on a prescribed reader for about two weeks before sending the book home for parents to read with their children and vice versa. Teachers believe that when parents value the time spent reading with the children, they provide intrinsic motivation to the children in their literacy development. Moreover, some teachers deem that follow-up activity at home builds children's interests and knowledge.

## **Theoretical Findings**

The central proposition of the theory generated is that pre-school teachers in Singapore respond to the Ministry of Education's literacy agenda using literacy materials through the integration of three dimensions of influences.

The first dimension of influences on the teachers' use of literacy materials involves the selection and types of literacy materials. In most of the pre-schools in Singapore, the selection of prescribed readers is done either by the management or the principal of the pre-school. In relatively few cases, the selection decision is conducted through a process of consultation with pre-school teachers. Apart from the prescribed books or readers, pre-school teachers select and use other materials that are appropriate to the age group of children they teach. The majority of the teachers prefer books that relate to the theme or topic within the curriculum. For nursery or four-year olds, most teachers choose books that introduce children to the basic concept of prints with simple and repetitive captions or sentences with slightly big fonts. In addition, these books are written with simple storylines. Features of such readers or books include familiar concepts, objects and action, and are often accompanied with predictable text structures and language patterns. The illustrations of such materials are also crucial according to the teachers. Most teachers feel that in order for the books to appeal to children, the

illustrations must be stunning, attractive, captivating and vivid. For the Kindergarten 1 or five-year olds, most teachers select books with clear print and vivid pictures. Most teacher participants agree that by kindergarten one, children have acquired some sight words that they can read and write hence books with a variety in sentence patterns and a blend of language structures with longer and more complex sentences are preferred. As children demonstrate greater confidence in their ability as readers, teachers introduce or teach letter-sound relationships and the strategies of blending and/or decoding. For the Kindergarten 2 or six-year olds, selection of materials depends on the abilities of the children. Teacher participants concur that Kindergarten 2 children use varied sources of information when reading. They rely on making meaning through the use of language structures and visual information in the book.

The second dimension of influences on pre-school teachers' use of literacy materials relates to their beliefs and experiences. Teachers' beliefs about literacy influence their instructional practices in the classroom (McGill-Franzen, 1992; Ang, V., 2002; Doyle, et al., 2004). Teachers' beliefs about literacy and their literacy practices are influenced by both the realities of the classroom (Shapiro & Kilbey, 1990) and the constraints imposed by the complexities of classroom life (Fang, 1996). The beliefs of the teachers in this study are also influenced by the Kindergarten Curriculum Framework and the conditions imposed by their school principal, management and curriculum team.

Most teachers in the study are of the view that literacy materials must engage and challenge children's learning. Based on their teaching experiences, teachers employ various teaching strategies in making use of the prescribed readers. They customise lessons in order to deliver a meaningful teaching session and use varied teaching strategies to meet the diverse learning needs of children. Teachers' prior knowledge of children affects and/or influences their choice of teaching strategies. In conducting a literacy programme, most teachers subscribe to professional development training and teaching resources or guides for systematic instructions and suggestions to deliver the lesson. To this end, it is noted that this dimension of influences is not independent but correlates to the first dimension of influences, which is that of the choice of literacy materials used.

The third dimension of influences concerns the literacy environment of the learners, and interrelates with other dimensions. Most teachers in the study are of the view that, in addition to the school environment or the physical literacy environment in the classroom, the home environment is essential to ensure success in literacy development. In the classroom, the literacy environment typically includes a designated 'literacy corner' for literacy related activities such as reading and writing, displays of children's work, and labels such as word and picture cards. The home literacy environment refers to the support of the home in reinforcing the teaching and learning that happens in class. The perspectives of teachers in this study are in line with research showing that quality communication at home is vital to children's language and literacy development (Gan, 2002; Saravanan & Sripathy, 2002; Heisner, 2005; Morrow, 2005).

## Conclusion

The research reported in this paper explored the curricular and pedagogical use of literacy materials in English literacy programmes in Singapore pre-schools from the perspectives of kindergarten teachers. The findings give insights into the ways in which pre-schools and teachers are contributing to the contemporary national literacy agenda in early English language and literacy education. Singapore pre-schools have the autonomy to use their own curriculum and, across the pre-school sector, teachers have various levels of input in choosing textbooks for their own classes. This study found that, in the context of literacy adoption programmes, kindergarten teachers' use of literacy materials is central to their classroom practices for the development of knowledge, skills and disposition in early literacy. It also found that teachers' curricular beliefs about early literacy are very much line with the Curriculum Framework for

Kindergartens in Singapore, and that their pedagogical strategies are most often influenced by their own experiences and knowledge of the children in their classrooms. The need for pre-service training and ongoing professional development in using literacy materials to meet the Ministry's literacy agenda was a key emergent theme.

The identified dimensions of influences on teachers' use of literacy materials highlight the impact of education reforms on early literacy classroom practices. The influences of choice of literacy materials, teacher beliefs and experience, and the literacy environment of the learner were found to be interrelated and interdependent. Regarding choice of materials, whether or not teachers have a say in choosing textbooks for their classes, the vast majority choose their own supplementary materials to suit the developmental needs of their learners, and profess a strong reliance on books and other text types as key curriculum resources. Providing teachers with a greater voice in the selection of appropriate literacy materials would help acknowledge their professionalism and expertise. Influences related to teacher beliefs and experiences support the findings of Doyle et. al. (2004) that the beliefs and views of teachers can influence the ways they teach. The teachers in this study share a strong belief in the value of child-centred pedagogy using developmentally appropriate materials, reflecting the national paradigm shift of early years education "towards a less academic and more childcentred curriculum" (Ang Ling-Yin, 2006, p. 206).

The dimension of influences involving the literacy environment takes literacy learning beyond the school context. The importance of home-school connections and, in particular, the link between parental involvement and children's early literacy development, is well established. This research found that participating kindergarten teachers recognise the importance of a literacy-rich environment for early language and literacy development, and take account of the influences of school, classroom and home environments in selecting or devising appropriate pedagogical strategies. They use readers to connect the home and school, encouraging parents to read with their children.

Globalisation embodies local responses to global issues and challenges. This paper highlights local responses by Singapore pre-school teachers to the influences of globalisation on early childhood literacy education. The prominence of early English literacy education in the Singapore government's policy agenda reflects increasing pressures, both locally and internationally, to learn English as the global lingua franca. Concomitantly, Singapore's willingness to institute a curriculum framework for kindergarten, with language and literacy one of six critical areas, suggests it is responding to global trends and international pressures to introduce education reforms in language and literacy, including classroom interventions at the very early levels of schooling. In 2012, MOE provided English language literacy assistance at kindergarten level to 250 pre-school centres and announced its aim of expanding such assistance to 100 more centres (MOE, 2012b). With English language proficiency fundamental to Singapore's international participation agenda, the quality of English literacy pre-school programmes, including teacher's use of literacy materials, is vital to children's language and literacy development and to their preparation for subsequent formal education in English. Singapore's reforms in English language policy and practice cannot afford to ignore the connections with early literacy education, nor the perspectives of pre-school teachers as key stakeholders in educational quality.

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