

Learning English as a Foreign Language at Home: The Practices of Taiwanese Mothers and Their Preschoolers

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Abstract: Researchers have indicated that many children from Asian countries have the experience of learning English prior to school at home or at private institutes. The Taiwanese government promotes informal and play-based teaching of English in the home if the parents would like their young children to learn English prior to formal instruction. This study is designed to investigate how Taiwanese mothers attempt to facilitate their children's English development by exploring how they engage their children in English learning at home. We also investigate whether there is a relationship between maternal educational attainment and maternal teaching practices and the use of resources. The sample consists of 647 mothers of preschoolers who responded to a questionnaire which surveyed their practices and resources utilized at home. The results showed that mothers differed in the extent to which they engaged in shared reading and provided toys and computer media for English instruction, and that maternal education is related to the types of strategies and resources provided. The findings provide significant information about what the mothers utilized to assist their young children to learn English language.

Key words: maternal education; EFL learning; practices; resources; early childhood

1. Introduction

It has frequently been noted that many parents from Chinese-speaking cultures place a high value on their children's educational achievement (Chan, 2004; Hung and Marjoribanks, 2005; Huntsinger and Jose, 2009). In many Asian countries, educational success and proficiency in English are closely interconnected (Gao, 2006; Jiang, 2003; Nunan, 2003; Park, 2007). This close interconnection has led many Chinese-speaking parents to focus on their children's English language development at a very early age, on the assumption that the earlier children are exposed to a second language, the more proficient they will become in that language. This situation raises questions about the strategies employed by parents to enhance their children's English development. The importance of this aspect of children's education can be seen in the proliferation throughout East Asia of private institutions or "cram schools" dedicated to teaching English to children in the years prior to the commencement of formal schooling, and/or to provide extra English tuition to children who have already commenced school.

The Taiwanese Ministry of Education prohibits the formal teaching of English in children's services prior to

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school but encourages parents to informally teach their children English at home if they want their young children learn English as a foreign language before formal instruction (Taiwan Ministry of Education, 2004). Anecdotal evidence suggests that a large number of parents are attempting to facilitate their children's English language development in their own homes, regardless of whether or not they, the parents, are themselves proficient in English. Evidence for this can be seen in the plethora of English teaching and learning materials and resources marketed to parents of preschoolers. These materials include children's English language books, English CDs, flash cards, magazines, CD-ROMs and computer games. The trend towards parents' home facilitation of their preschool-aged children's English development tends to endorse the Taiwanese government's guidelines, yet there is minimal research on the types of practices engaged in by mothers of preschool-aged children as they attempt to facilitate their preschoolers' English development at home.

Information about mothers' home teaching practices and use of resources is crucial for several reasons. Building on the well-established recognition of the importance of the early years for children's long term academic achievement (Bennett & Tayler, 2006), an understanding of the learning experiences children engage in at home will provide important information for early childhood professionals to enable them to build on children's existing knowledge bases. It will facilitate the creation of partnerships with parents through increased understanding of continuities and discontinuities between the home and preschool contexts. Secondly, such information will potentially inform educational policy, enabling decision-makers to target families where parents and children would benefit from additional support. If proficiency in English language is vital to long term academic and career success, and national prosperity, it will be important for countries such as Taiwan to address factors such as the optimal manner in which to facilitate young children's English language development while simultaneously supporting their development of Chinese language and culture.

The Taiwanese Ministry of Education's position on the importance of informal language learning at home appears to be compatible with recent approaches to early childhood pedagogy. According to an emergent literacy perspective (Purcell-Gates, 2001; Rhyner, Haebig, and West, 2009; Teale and Sulzby, 1986), young children begin to learn about written text right from birth, through engaging in activities such as songs and nursery rhymes, shared reading and dramatic play (Makin and Whitehead, 2004; McGee, 2003), long before they commence formal instruction in school. It is thought that such learning experiences are more effective than formal, skills-based instructional approaches. This view is supported by Siraj-Blatchford and Sylva (2004) who, in their longitudinal study of preschool-aged children in the United Kingdom, found that didactic materials such as language charts and stencils, and activities such as tracing letters and numbers and rote learning, were not facilitative of language and literacy acquisition. Similarly, home literacy experiences and the learning resources provided by parents are recognized as important influences on children's language and literacy development (DeBaryshe, 1993; Hood, Conlon and Andrews, 2008; Ko and Chan, 2009; Korat, Klein and Segal-Drori, 2007; Roberts, Jurgens and Burchinal, 2005). Dickinson and Tabors (2001) demonstrated how extended conversation during shared book reading can be beneficial in children's language development. Mol, Bus, deJong and Smeet (2008) indicated that the success of interactive and dialogic shared book reading increased children's vocabulary.

It has repeatedly been shown that there is an inextricable connection between language and culture, so the manner in which parents attempt to teach or assist their children to learn English will be strongly influenced by their own values, attitudes and beliefs about how children learn and what are appropriate teaching methods and practices (Lynch, Anderson, Anderson and Shapiro, 2006; Sonnenschein and Munsterman, 2002; Weigel, Martin and Bennett, 2006). For this reason, the manner in which Chinese-background parents support their children's

development has been studied in a range of contexts, with much research suggesting that Chinese parents favour a more direct teaching approach than is advocated by researchers from Western cultural contexts (Li, 2006; Ran, 2000, cited in Wu & Honig, 2010). Wu and Honig (2010), for example, assessed Taiwanese mothers' beliefs about reading aloud to their preschoolers and found that a majority of Taiwanese mothers did not support an "emergent literacy approach" to reading instruction. Similarly, Li (2006) pointed out Chinese immigrant parents tended to emphasize school-related literacy practices to enhance their children's literacy skills.

The effectiveness of such direct teaching in Chinese context is supported by Li, Corrie and Wong (2008), who followed 88 children from middle-class families in Beijing and Hong Kong to investigate the relationships between early teaching practices and later child outcomes in Chinese literacy skills. Drawing on Senechal, LeFevre, Thomas and Daley's literacy pedagogies framework (1998) and Senechal and LeFevre (2002), Li et al. (2008) categorized parents according to whether they provided formal literacy practices, including drills and rote learning of written Chinese words, or informal practices, including shared reading of children's picture books and games designed to motivate children to become independent learners. Follow-up literacy practices had higher literacy scores at primary school. Li et al. (2008) conclude that early formal literacy practices are valuable in teaching Chinese literacy, and that informal literacy practices may not be applicable to Chinese contexts due to the complicated nature of Chinese orthography.

1.1 Language and Literacy Teaching Practices in English as a Foreign Language (EFL) Contexts

It is important to note that Wu and Honig's (2010) and Li et al.'s (2008) research focused on Chinese literacy teaching and learning in Taiwan, Hong Kong and in Beijing as opposed to that of EFL teaching and learning contexts. Also, Li's (2006) study focused on how Chinese children in the U.S. learned English reading, writing and mathematics at home. We do not know whether similar formal literacy practices would be used by parents teaching English as a foreign language in a different Chinese context, such as Taiwan, where informal and play-based home teaching practices are actively promoted by the governmental guidelines. Two aspects of the learning environment were used as a frame in the present study to understand how mothers facilitate their children's EFL learning at home; the use of certain pedagogical practices (Makin and Whitehead, 2004; McGee, 2003) and the provision of a variety of learning resources (Marsh and Thompson, 2001; Nikolajeva, 2003).

Shared reading of picture books is one of the best known home literacy experience discussed in the literature (Manolistsis et al. 2009) and has been shown to increase children's vocabulary, develop their concepts of print and phonemic awareness, and engender an interest in and enjoyment of written texts (Whitehurst and Lonigan, 2001). It has also been shown to promote children's language growth (Saracho and Spodek, 2009) and to affect early word-reading development (Manolisteis et al. 2009). In EFL contexts, Lee (2010) found that, regardless of their own English language proficiency, Taiwanese parents of successful English learners tended to engage their children in shared book reading. Other benefits of reading aloud have also been mentioned, such as enabling children to become familiar with the sounds and rhythms of English language (Lin, 2003), and encouraging their reading interests (Shih, 2007).

The availability of learning resources has also been shown to relate to children's language and literacy development. For example, in the context where children are learning their mother tongue as their first language (L1), the number of children's books at home has been found to relate to children's subsequent reading attainment (Bus, Ijzendoorn and Pellegrini, 1995; Ko and Chan, 2009; Senechal and LeFevre, 2002; Storch and Whitehurst, 2002). Lau and McBride (2005) found that greater exposure to books at home robustly predicted children's later

reading ability, regardless of whether they occurred in Western or Chinese communities. In the EFL context in Taiwan, the use of English picture books for teaching young children English (Hsu, 2004) and the challenges and benefits of integrating English picture story books into EFL teaching in elementary school (Sheu, 2006) have been discussed. Hsu (2004) found that preschool English teachers believed that the use of English picture books could inspire young learners' imagination, improve their cognitive ability and arouse their interest. Sheu (2006) also found that Taiwanese EFL teachers strongly believed in the educational value of English picture story books, though they had to apply various strategies to deal with the challenges they encountered in their classroom, such as large class sizes and the limited of availability of suitable picture books. However, these studies differ from the present study in that they were undertaken in school contexts with qualified teachers, not in home contexts with mothers and their preschoolers.

The value of digital technologies as resources in children's learning has become a focus of research in recent years, particularly in early childhood and English as foreign language (EFL) contexts, as multimodal texts have become ubiquitous in young children's lives (Tsou, Wang and Tzeng, 2006; Verdugo and Belmonte, 2007). CD-ROM storybooks have been shown to increase motivation for reluctant readers at school and for learners of English as a foreign language (Adam and Wild, 1997). Edwards, Monaghan and Knight (2000) claimed that the use of bilingual interactive software led to increases in the levels of students' language awareness. Electronic books which incorporate features including online dictionaries, animated pictures and sound effects have been shown to increase children's enjoyment and comprehension of storybooks in the context in which children are learning English as their first language (L1) (Shirley, Naomi, Cliff and Anne, 2007).

Many CD-ROMs and electronic storybooks provide opportunities to hear correct word pronunciation, thus potentially overcoming some difficulties for young EFL learners who do not have the opportunity to hear spoken English. Sun and Dong (2004) argued that information presented in audio and video animated formats can be integrated to create an attractive language context to motivate young children to learn a second language. They emphasized the advantages for children who have little or no access to the targeted second language (L2) input in daily life, such as many young children from Chinese backgrounds living in countries like Taiwan. Recently Chang (2010) investigated the differences among 52 Taiwanese EFL elementary school students' English reading comprehension by using comprehension tests, story recall tests and a questionnaire. Chang (2010) compared the teacher and computer mediated storytelling approaches, such as the use of conventional storybooks and interactive CD-ROM storybooks, on EFL children's English reading comprehension. Chang found that students learned words and understood the stories in both story telling formats, highlighting the efficacy of electronic resources in teaching English to children.

Recently, because of the rise in advanced technology in toy design, many toy products to teach children English are digitally enhanced, for example, "intelligent" or "talking" stuffed animals or cartoon figures. Alternatively, simple toys such as alphabet blocks and better board games may be used to teach English. As is the case with mother-child interactions surrounding shared reading, the interactions surrounding toy play have also been found to play a crucial role in fostering language skills (Bergen, Hutchinson, Nolan, and Weber, 2010; Laakso, Poikkeus, Eklund and Lyytinen, 1999; Newland, Roggman and Boyce, 2001; Tamis-LeMonda, Bornstein and Baumwell, 2001).

One contentious area in children's literacy development is the use of flashcards. Critics argue that the use of flashcards alone will not provide the basic skills which are required to become a good reader (Goodman and Goodman, 1976). Yet Hirsh-Pasek, Golinkoff and Eyer (2003) indicated that, in a recent survey, more than half of

the parents (65%) believed that flash cards can promote the intellectual development of their two year old child. Flash cards, especially those with pictures as well as words, are used by many Chinese parents to build their child's vocabulary (Zhang, Jin, Shen, Zhang and Hoff, 2008). They are commonly used because they are simple to make and are available at affordable prices for most families. However, these studies about the use of toys and flash cards are based solely on the context of first language learning, so their use in EFL contexts with very young children is as yet unknown.

1.2 The Role of Maternal Education in EFL Teaching Contexts

Recent studies of the home learning environment in Western countries have found that variations in maternal teaching practices are related to maternal education. Research on interaction between mothers and their preschool aged children has repeatedly shown a relationship between maternal education and the quality of the home literacy environment (Bingham, 2007; Leppanen et al, 2004; Skibbe, Justice, Zucker and McGinty, 2008). In Chinese contexts, there is also evidence to suggest that maternal education may be related to home literacy provisions. Tsai's (2001) research, for example, found that parents' educational level was related to the frequency with which parents spoke English to their children at home. Chang (2008; p. 432) found that "parents with higher educational level(s) spent more time helping their children study English than those with lower educational level(s)". Some evidence of parental practices is found in Wu and Honig, (2010), who report that maternal education was a significant predictor of home literacy resources with higher educated mothers owning significantly more books in the home than less educated mothers. Such emergent findings lead us to hypothesize that maternal educational achievement might be related to mothers' pedagogical practices and provision of resources used for their young children's EFL learning at home.

1.3 Research Goals

The present study has been designed to investigate how mothers attempt to facilitate their children's English development. Specifically, the study aimed to determine:

(1) The kinds of teaching practices Taiwanese mothers engage in at home to teach English to their preschool aged child;

(2) The types of teaching resources utilized by mothers, including children's English language books, toys, CD-ROMs, and computer stories and games;

(3) Whether there is a relationship between maternal education and mothers' teaching practices and use of resources.

2. Methodology

2.1 Instrument

This study reports on the responses of 647 participants to a questionnaire which was designed to explore Taiwanese mothers' ideas, attitudes, beliefs and practices in relation to the home teaching of English to their child aged from three to six years. The responses to five questions from the survey are discussed in this paper. Two of the questions relate to teaching practices:

- Do you read to your children in English?
- Do you show your children flash cards to teach them to read and write in English? Three of the questions relate to the provision of resources:
- Do you have toys for your child's English learning?

- Do you have CD-ROMs and/or computer games for your child's English learning?
- How many children's English language books for your children do you own?

The first 4 questions listed above asked for a yes-no response. The fifth question asked participants to indicate the number of books on a 4-point scale, ranging from no books, fewer than 10, 10-30 and more than 30.

2.2 Coding of Demographic Data

Mothers' educational level was coded according to the highest qualification attained:

- high school or vocational school only (n=154)
- college diploma (n=124)
- Bachelor degree (n=215), or
- Master or Doctoral degree (n=75).

2.3 Method of Analysis

Survey responses were analyzed using SPSS (Statistical Program for Social Sciences) 17. The frequencies of responses to each survey question were generated to explore the prevalence of the different teaching practices and resources. The two 2×4 Chi Square tests and a 4×4 Chi Square test were conducted to determine whether mothers' educational level was related to:

- their reported English teaching practices
- their reported use of English teaching resources, and
- the number of children's English language books they reportedly have at home.

Because not all the participants responded to every question in the questionnaire, the sample size for each analysis is provided in the relevant table of results.

3. Results

The results are presented in two sections. First, we present the number and percentage of responses made by the participants in relation to their English teaching practices and their provision of English teaching resources for their children, including children's English language books, toys, computer software and games. Secondly, we determine whether there is a relationship between the above practices and resources and mothers' educational attainment.

3.1 Mothers' English Teaching Practices and Provision of Resources for Learning English

Table 1 sets out the number of mothers who reported reading to their children in English and using English flash cards to teach their children to read and write in English and their provisions of resources for learning English such as toys, CD-ROMs and computer games.

Table 1 Mothers English Teaching Fractices						
Survey questions	Yes %	No %				
Mothers' English teaching practices						
Do you read to your children in English? $(n = 644)$	34.5	66.5				
Do you show your children flash cards to teach them to read and write in English? $(n = 641)$	23.9	76.1				
Mothers' provision of resources for learning English						
Do you have toys for your child's English learning? $(n = 643)$	72.9	27.1				
Do you have CD-ROMs and/or computer games for your child's English learning? (n = 643)	59.9	40.1				

Table 1 Mothers' English Teaching Practices

In term of mothers' teaching practices, nearly 35% of the mothers reported that they read to their children in English and nearly 24% of the mothers used flash cards for their children's English language learning. Asked

about the provision of resources for learning English, nearly 73% of the mothers provided toys and 60% of the mothers provided CD-ROMs and computer games for their children's English learning. These figures suggest a preference for the provision of informal resources such as toys and games rather than more direct strategies such as reading and flash cards. Resent research indicates that playing computer games can be a rich resource for fostering literacy activity. Hsin (2011) noted that the new-immigrant mothers in Taiwan facilitated their young children's Chinese reading through the use of computer games.

Table 2 sets out the number of children's English language books written in English which the participants in this study reported owning.

Table 2 The Number of Children's English Language Books in the Home							
Survey question	None %	Fewer than 10 %	10-30%	More than 30%			
How many children's English language books for your	7.9	34.8	33.6	23.7			
children do you own? ($n=646$)							

Table 2 The Number of Children's English Language Books in the Home

While nearly 8% of the participants stated that they owned no English picture books, the remaining participants reported that they had at least some picture story books in their home for their children to use.

3.2 The Relationship between Maternal Education and Reported Practices and Provision of Resources for English Language Learning

The above results suggest that a majority of Taiwanese mothers provide English language toys and computer games, and own children's English language books to assist their children to learn English. In this section, we look more closely at the participants' responses in relation to their educational background. The results for the Chi Square analysis of the relationship between maternal education and reported EFL practices and provisions are presented in Table 3.

	$X^{2}(3)$	High school n (%)	Diploma n (%)	Bachelor n (%)	Master or PhD n (%)
Mothers' practices	•				
Do you read to child in English?	55.17***				
Yes (n=194)		22 (14)	36 (29)	92 (42)	44 (59)
No (n=373)		131 (86)	88 (71)	123 (58)	31 (41)
Do you use English flash cards?	1.80				
Yes (n=133)		31 (20)	28 (23)	56 (26)	18 (24)
No (n= 431)		121 (80)	96 (77)	157 (74)	57 (76)
Mothers' resources					
Toys	40.615^{***}				
Yes (n=422)		85 (55)	97 (78)	177 (83)	63 (84)
No (n= 145)		68 (45)	28 (22)	37 (17)	12 (16)
Computer media	1.98				
Yes (n= 335)		89 (58)	80 (43)	125 (58)	41 (55)
No (n= 233)		64 (42)	45 (57)	90 (42)	34 (45)
Number of children's English lang	U U	home (n=568)			
None (n= 39)	69.34***	29 (19)	5 (4)	4 (2)	1(1)
Fewer than 10 (n= 201)	7	64 (42)	46 (37)	71 (33)	20 (26)
Between 10-30 (n= 195)	1	46 (30)	41 (33)	81 (38)	27 (36)
More than 30 (n=133)		15 (10)	32 (26)	59 (27)	27 (36)
AL (*** < 0.001	•	•	•	•	•

Table 3 Chi Square Analysis of the Relationship between Maternal Education and Reported EFL Practices and Provisions

Note: *** $p \le 0.001$.

There was a statistically significant relationship between mothers' educational level and the practice of reading in English to children and the provision of toys. Higher educated mothers were more likely to read in

English to their child and provide English educational toys than lower educated mothers. There was also a statistically significant positive relationship between the number of children's English language books owned at home and maternal education. Results (see Table 3) revealed that higher educated mothers owned more English children's books at home than lower educated mothers. However, these results showed that the relationship between mothers' educational background and their reported use of English flash cards and the provision of computer games was not significant.

4. Discussion

This study was designed to investigate how Taiwanese mothers report that they are facilitating their children's English development at home in the years before children commence formal schooling. This study was motivated by previous research demonstrating that Chinese parents are very much concerned with and involved in their young children's English as foreign language learning (Lee, 2010; Gao, 2006), and that Chinese parents prefer formal practices for their children's learning at home and at school (Li, Corrie and Wong, 2008).

The first objective was to assess the mothers' reported use of two distinct English teaching practices, shared reading and the use of flash cards. Only about a third of mothers read children's English language books to their child. This seems surprising, given the fact that informal and play-based home teaching of English is promoted by the Taiwanese government and there is a thriving mass market in cheap children's English language books and parenting guides. The fact that only a quarter of mothers reported using flash cards, a practice which is often seen as indicative of a more formal approach to teaching children, suggests that the common view of Chinese parents as favouring rote learning is not necessary accurate, at least for Chinese under 7 years of age.

The second objective was to assess the mothers' reported provision of three types of English learning resources, toys, computer media like CD-ROMs and games, and children's English language books. Around three quarters of the mothers reported that they provided their children with toys of various kinds to learn English, and over half provided EFL CD-ROMs and computer games for this purpose. In relation to ownership of children's English books, only 8% of mothers reported that they did not own any children's English language books for their child, while almost one third of mothers reported owning over 30 children's English picture books. Our study did not probe the reasons behind mothers' decisions regarding their provision of resources for young children's EFL learning at home, but it may be that mothers desire their children to learn English but for a variety of reasons, such as lack of time, tiredness or lack of confidence, do not feel able to take an active role in their children's English learning through shared reading and use of flash cards. That means that regardless of whether the mothers saw themselves as having the capability of teaching their children English formally or informally at home or not, mothers nevertheless provided learning materials and financial support to facilitate their children's English learning.

Our results confirm that mothers' reported EFL teaching practices and provision of resources were related to their educational attainment, suggesting that the English learning environment experienced by children of higher educated mothers is different from that experienced by children of lower educated mothers. For example, practices such as reading to children in English, owning more children's English language books and using English educational toys are more likely to be employed by higher-educated mothers. When maternal education was explored in relation to shared reading and use of flash cards, a picture emerged where more highly educated mothers were significantly more likely to read children's English books to their child, but there was no significant relationship between use of flash cards and maternal education. This study therefore does not support the findings

of research in monolingual western countries which found that flash cards were more often used as a didactic method by less educated mothers (Stipek, Milburn, Clements and Daniels, 1992).

The findings are consistent with some of the findings of Wu and Honig's (2010) study about Taiwanese mothers' reading beliefs. They indicated that there was a significant relationship between maternal education and the number of books owned at home. It could be suggested that higher educated mothers have more money to spend on facilitating their child's EFL learning and therefore are able to buy more children's English language books. Interestingly, there was no statistically significant difference in the provision of computer media among the mothers of all educational attainments. While other research has not specifically sought information about parental use of computer stories and games for English instruction, Lohr and Meyer did find that parental attitudes towards the Internet were not related to education or income but to the parents' experiences with the internet (Lohr and Meyer, 1999, cited in Chan and Shen, 2004).

4.1 Implications

The findings also have implications for early childhood educators in Taiwan, as the findings may assist early childhood educators to provide experiences that complement and build on the experiences that children participate in at home. Moreover, these findings may assist staff to gain insight into the factors influencing the children and families who attend their centres, enabling them to provide learning experiences and parent information which relates directly to the home practices they engage in. The results suggest that maternal educational level is a strong predictor of the type of EFL learning environment likely to be available to young children, at least as far as shared reading, availability of educational toys and ownership of English picture books is concerned. If the Taiwanese government aims to raise the English proficiency of all Taiwanese citizens, it may be better to target lower educated mothers, who would benefit from additional support through maternal education programs and provision of play-based materials and other resources for English teaching.

4.2 Limitations and Directions for Further Research

Using a survey methodology, this study provided a broad overview of current home teaching practices and provision of resources as reported by Taiwanese mothers of three to six year old children. However, surveys are limited in that it is not possible to explore the reasons behind the participants' responses. There may have been some ambiguity and inconsistent interpretations of some of the questions in the survey. For example, some mothers may have interpreted the expression "reading to child in English" to refer to the practice of engaging in letter-sound or word-sound drill-like activities, whereas other mothers may have interpreted "reading to child in English" to refer to shared reading of whole narratives with an emphasis on meaning. Moreover, storybook reading is a highly valued activity in the Taiwanese context, so mothers may have felt obligated to report that they read to their children either in Chinese or in English to meet social expectations.

These limitations lead to two directions for further research. First, further investigation is needed to gain a more nuanced understanding of mothers' beliefs and their actual practices in the home. Our findings are based on maternal report, not actual observation, and the mothers were only asked about two teaching practices. Further research in the form of interviews would enable us to understand more about the thinking behind mothers' practices and decision-making and the efficacy of maternal teaching practices, which have not been addressed in this study.

Secondly, research is still at an early stage in terms of maternal provision of digital information and communication technologies as a resource in young children's home EFL learning. The Taiwanese government has recently promoted an E-Generation Manpower Cultivation Plan, aiming to "develop a new generation of

creative, lively youths capable of international dialogue and adept at using information and English skills to their advantage" (Taiwan Ministry of Education, 2006). Therefore, future research needs to investigate the use of digital technology for EFL learning at home.

There is still much to understand about Taiwanese mothers' experiences in attempting to provide their children with knowledge of English language, which is seen as vital to their future success and wellbeing. We do not know how mothers use the multitude of English teaching resources now available. We do not know their goals and motivations. It is important for the future of Taiwanese children and families to gain a deeper understanding of these issues which shape the lives of us all in an age of globalization.

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References:

Adam N. and Wild M. (1997), "Applying CD-ROM interactive storybooks to learning to read", *Journal of Computer Assisted Learning*, Vol. 13, No. 2, pp. 119-132.

Bennett J. and Tayler C. (2006), Starting strong II: Early Childhood Education and Care, OECD.

- Bergen D., Hutchinson K., Nolan J. T. and Weber D. (2010), "Effects of infant-parent play with a technology-enhanced toy: Affordance-related actions and communicative interactions", *Journal of Research in Childhood Education*, Vol. 24, No. 1, pp. 1-17.
- Bingham G. E. (2007), "Maternal literacy beliefs and the quality of mother-child book-reading interactions: Associations with children's early literacy development", *Early Education and Development*, Vol. 18, No. 1, pp. 23-49.
- Bus A. G, Ijzendoorn M. H. V. and Pellegrini A. D. (1995), "Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy", *Review of Educational Research*, Vol. 65, No. 1, pp. 1-21.
- Chan E. Y. M. (2004), "Narratives of experience: How culture matters to children's development", Contemporary Issues in Early Childhood, Vol. 5, No. 2, pp. 145-159.
- Chan K. and Shen F. (2004), "Parental attitudes towards children's internet use and online advertising in Hong Kong", paper presented at the *Third Annual Hawaii International Conference on Social Science*, Hawaii.
- Chang J. W. (2010), "The comparison of the teacher-mediated storytelling approach and the computer-mediated storytelling approach on EFL children's English reading comprehension and story recall in Taiwan", *Master Thsis*, National Pintung University of Education, Pingtung, available online at: http://etd.npue.edu.tw/ETD-db/ETD-search/view_etd?URN=etd-0623110-113336.
- Chang Y. F. (2008), "Parents' attitudes toward the English education policy in Taiwan", *Asia Pacific Education Review*, Vol. 9, No. 4, pp. 423-435.
- DeBaryshe B. D. (1993), "Joint picture-book reading correlates of early oral language skill", *Journal of Child Language*, Vol. 20, No. 2, pp. 455-461.
- Dickinson D. K. and Tabors P. O. (2001), *Beginning Literacy with Language: Young Children Learning at Home and School*, Baltimore, Md.: Brookes Publishing.
- Edwards V., Monaghan F. and Knight J. (2000), "Books, pictures and conversations: Using bilingual multimedia storybooks to develop language awareness", *Language Awareness*, Vol. 9, No. 3, pp. 135-146.
- Gao X. (2006), "Strategies used by Chinese parents to support English language learning", *RELC Journal*, Vol. 37, No. 3, pp. 285-298.
- Goodman K. S. and Goodman Y. M. (1976), "Learning to read is natural", paper presented at the *Conference on Theory and Practice of Beginning Reading Instruction*, University of Pittsburgh, Learning Research and Development Center, available online at: http://eric.ed.gov/PDFS/ED155621.pdf.
- Hirsh-Pasek K., Golinkoff R. M. and Eyer D. E. (2003), Einstein Never Used Flash Cards: How Our Children Really Learn and Why They Need to Play More and Memorize Less, New York: Rodale.
- Hood M., Conlon E. and Andrews G. (2008), "Preschool home literacy practices and children's literacy development: A longitudinal analysis", *Journal of Educational Psychology*, Vol. 100, No. 2, pp. 252-271.

- Hsin C. T. (2011), "Active agents: The new-immigrant mothers' figured worlds of home literacy practices for young children in Taiwan", *Asia-Pacific Education Researcher*, Vol. 20, No. 1, pp. 17-34.
- Hsu H. C. (2004), "The use of English picture books for teaching English to young children" (in Chinese), *Master Thesis*, Chaoyang University of Technology, Taichung County, Taiwan, available online at: http://ethesys.lib.cyut.edu.tw/ETD-db/ETD-search-c/view_etd?URN=etd-0705104-143445.
- Hung C. L. and Marjoribanks K. (2005), "Parents, teachers and children's school outcomes: A Taiwanese study", *Educational Studies*, Vol. 31, No. 1, pp. 3-13.
- Huntsinger C. S. and Jose P. E. (2009), "Parental involvement in children's schooling: Different meanings in different cultures", *Early Childhood Research Quarterly*, Vol. 24, No. 4, pp. 398-410.
- Jiang Y. (2003), "English as a Chinese language", English Today, Vol. 19, No. 2, pp. 3-8.
- Ko H. W. and Chan Y. L. (2009), "Family factors and primary students' reading attainment: A Chinese community perspective", *Chinese Education & Society*, Vol. 42, No. 3, pp. 33-48.
- Korat O., Klein P. and Segal-Drori O. (2007), "Maternal mediation in book reading, home literacy environment, and children's emergent literacy: A comparison between two social groups", *Reading and Writing*, Vol. 20, No. 4, pp. 361-398.
- Laakso M. L., Poikkeus A. M., Eklund K. and Lyytinen P. (1999), "Social interactional behaviors and symbolic play competence as predictors of language development and their associations with maternal attention-directing strategies", *Infant Behavior and Development*, Vol. 22, No. 4, pp. 541-556.
- Lau J. Y. H. and McBride-Chang C. (2005), "Home literacy and Chinese reading in Hong Kong children", *Early Education & Development*, Vol. 16, No. 1, pp. 5-22.
- Lee Y. C. (2010), "Parents' perceived roles and home practices in supporting Taiwanese children's English language and literacy learning", *English Teaching & Learning*, Vol. 34, No. 1, pp. 1-53.
- Leppanen U., Niemi P., Aunola K. and Nurmi J. E. (2004), "Development of reading skills among preschool and primary school pupils", *Reading Research Quarterly*, Vol. 39, No. 1, pp. 72-93.
- Li G. (2006), "What do parents think? Middle-class Chinese immigrant parents' perspectives on literacy learning, homework, and school-home communication", *School Community Journal*, Vol. 16, No. 2, pp. 27-46.
- Li H., Corrie L. F. and Wong B. K. M. (2008), "Early teaching of Chinese literacy skills and later literacy outcomes", *Early Child Development and Care*, Vol. 178, No. 5, pp. 441-459.
- Lin H. L. (2003), "Integrating English children's picture books with teaching children English as a foreign language in 9-year join curricula plan for elementary and junior high schools", English Teaching & Learning, Vol. 27, No. 4, pp. 15-30.
- Lynch J., Anderson J., Anderson A. and Shapiro J. (2006), Parents' beliefs about young children's literacy development and parents' literacy behaviors", *Reading Psychology*, Vol. 27, No. 1, pp. 1-20.
- Makin L. and Whitehead M. R. (2004), *How to Develop Children'S Early Literacy: A Guide for Professional Careers and Educators*, London: Paul Chapman Publishing.
- Manolitsis G, Georgiou G, Stephenson K. and Parrila R. (2009), "Beginning to read across languages varying in orthographic consistency: Comparing the effects of non-cognitive and cognitive predictors", *Learning and Instruction*, Vol. 19, No. 6, pp. 466-480.
- Marsh J. and Thompson P. (2001), "Parental involvement in literacy development: Using media texts", *Journal of Research in Reading*, Vol. 24, No. 3, pp. 266-278.
- McGee L. M. (2003), "Book acting: Storytelling and drama in the early childhood classroom", in: D. M. Barone & L. M. Morrow (Eds.), *Research-Based Practices in Early Literacy*, New York: Guilford Publications, pp. 157-172.
- Mol S. E., Bus A. G., de Jong M. T. and Smeets D. J. H. (2008), "Added value of dialogic parent-child book readings: A meta-analysis", *Early Education & Development*, Vol. 19, No. 1, pp. 7-26.
- Newland L. A., Roggman L. A. and Boyce L. K. (2001), "The development of social toy play and language in infancy [small star, filled]", *Infant Behavior and Development*, Vol. 24, No. 1, pp. 1-25.
- Nikolajeva M. (2003), "Verbal and visual literacy: The role of pictures books in the reading experience of young children", in: Hall N., Larson J. and Marsh J. (Eds.), *Handbook of Early Childhood Literacy*, SAGE.
- Nunan D. (2003), "The impact of English as a global language on educational policies and practices in the Asia-pacific region", *TESOL Quarterly*, Vol. 37, pp.589-613.
- Park J. (2007), "Korean parents in 'English fever' and their 'early study-abroad' children in the United States: Parental beliefs and practices concerning first language peers", *PhD Dissertation*, Indiana University, available online at: http://proquest.umi.com/pqdweb?did=1404356301&Fmt=7&clientId=13642&RQT=309&VName=PQD.
- Purcell-Gates V. (2001), "Emergent literacy is emerging knowledge of written, not oral, language", *New Directions for Child and Adolescent Development*, No. 92, pp. 7-22.

- Rhyner P. M., Haebig E. K. and West K. M. (2009), "Understanding frameworks for the emergent literacy stage", in: Rhyner P. M. (Ed.), *Emergent Literacy and Language Development: Promoting Learning in Early Childhood*, New York: Guilford Press, pp. 5-35.
- Roberts J., Jurgens J. and Burchinal M. (2005), "The role of home literacy practices in preschool children's language and emergent literacy skills", *Journal of Speech Language, and Hearing Research*, Vol. 48, No. 2, pp. 345-359.
- Saracho O. N. and Spodek B. (2010), "Parents and children engaging in storybook reading", *Early Child Development and Care*, Vol. 180, No. 10, pp. 1379-1389.
- Senechal M. and LeFevre J. A. (2002), "Parental involvement in the development of children's reading skill: A five-year longitudinal study", *Child Development*, Vol. 73, No. 2, pp. 445-460.
- Senechal M., LeFevre J., Thomas E. and Daley K. (1998), "Differential effects of home literacy experiences on the development of oral and written language", *Reading Research Quarterly*, Vol. 33, No. 1, pp. 96-116.
- Sheu H. C. (2006), "The challenges of using English picture story books with primary school students in Taiwan", *English Teaching & Learning*, No. 1, pp. 39-60.
- Shih M. M. (2007), "Applying picture books on English reading instructional design of elementary beginners" (in Chinese), *Master Thsis*, Tamkang University, Taipei, Taiwan.
- Shirley G, Naomi D., Cliff M. and Anne M. (2007), "Electronic books: Children's reading and comprehension", *British Journal of Educational Technology*, Vol. 38, No. 4, pp. 583-599.
- Siraj-Blatchford I. and Sylva K. (2004), "Researching pedagogy in English pre-schools", *British Educational Research Journal*, Vol. 30, No. 5, pp. 713-730.
- Skibbe L. E., Justice L. M., Zucker T. A. and McGinty A. S. (2008), "Relations among maternal literacy beliefs, home literacy practices, and the emergent literacy skills of preschoolers with specific language impairment", *Early Education & Development*, Vol. 19, No. 1, pp. 68-88.
- Sonnenschein S. and Munsterman K. (2002), "The influence of home-based reading interactions on 5-year-olds' reading motivations and early literacy development", *Early Childhood Research Quarterly*, Vol. 17, No. 3, pp. 318-337.
- Stipek D., Milburn S., Clements D. and Daniels D. H. (1992), "Parents' beliefs about appropriate education for young children", *Journal of Applied Developmental Psychology*, Vol. 13, No. 3, pp. 293-310.
- Storch S. A. and Whitehurst G. J. (2002), "Oral language and code-related precursors to reading: Evidence from a longitudinal structural model", *Developmental Psychology*, Vol. 38, No. 6, pp. 934-947.
- Sun Y. and Dong Q. (2004), "An experiment on supporting children's English vocabulary learning in multimedia context", Computer Assisted Language Learning, Vol. 17, No. 2, pp. 131-147.
- Taiwan Ministry of Education (2004), The Brochure of Early Childhood English Education Policy (in Chinese), available online at: http://www.ece.moe.edu.tw/document/earleng.pdf/earleng.html.
- Taiwan Ministry of Education (2006), "Challenge 2008: national development plan e-generation manpower cultivation plan", available online at: http://english.moe.gov.tw/ct.asp?xItem=7043&ctNode=784&mp=11#121.
- Tamis-LeMonda C. S., Bornstein M. H. and Baumwell L. (2001), "Maternal responsiveness and children's achievement of language milestones", *Child Development*, Vol. 72, No. 3, pp. 748-767.
- Teale W. H. and Sulzby E. (1986), Emergent Literacy: Writing and Reading, Norwood, N.J.: Ablex Pub. Corp.
- Tsai C. H. (2001), "Parents' attitudes towards English learning for their kindergarten children", Master Thsis, Nanhua University, Taiwan, available online at: http://etds.ncl.edu.tw/theabs/service/detail_result.jsp.
- Tsou W., Wang W. and Tzeng Y. (2006), "Applying a multimedia storytelling website in foreign language learning", *Computers & Education*, Vol. 47, No. 1, pp. 17-28.
- Verdugo D. R. and Belmonte I. A. (2007), "Using digital stories to improve listening comprehension with Spanish young learners of English", *Language Learning and Technology*, Vol. 11, No. 1, pp. 87-101.
- Weigel D. J., Martin S. S. and Bennett K. K. (2006), "Mothers' literacy beliefs: Connections with the home literacy environment and pre-school children's literacy development", *Journal of Early Childhood Literacy*, pp. 191-211.
- Whitehurst G. J. and Lonigan C. J. (2001), "Emergent literacy: Development from prereaders to readers", in: Neuman S. B. and Dickinson D. K. (Eds.), *Handbook of Early Literacy Research*, New York: Guilford Press, p. 494.
- Wu C. C. and Honig A. S. (2010), "Taiwanese mothers' beliefs about reading aloud with preschoolers: Findings from the parent reading belief inventory", *Early Child Development and Care*, Vol. 180, No. 5, pp. 647-669.
- Zhang Y., Jin X., Shen X., Zhang J. and Hoff E. (2008), "Correlates of early language development in Chinese children", *International Journal of Behavioral Development*, Vol. 32, No. 2, pp. 145-151.