原著

未就学児のアルファベットと文字・語彙への 興味・熟達に関する研究 一小学校児童の文字学習、指導に示唆すること—

橋 元 知 子¹⁾·佐 藤 久美子²⁾

Investigating Pre-primary School Children's Interest and Mastery of the Alphabet and Vocabulary: Implications for Vocabulary Instruction and Learning in Primary School

Tomoko Hashimoto¹⁾ and Kumiko Sato²⁾

Abstract

This study examines pre-primary school children's interest and mastery of the alphabet and vocabulary by validating the effects of an English learning material created to acquire the four skills of English holistically. A literacy development test and a parental questionnaire were administered before and after their learning with the materials. Analysis of the data suggests that the children seemed to have recognized the connection between uppercase and lowercase characters in the post-test. In addition, children appeared to have gained some understanding of listening to letters and vocabulary and connecting these with written characters. Furthermore, their parents seemed to have noticed an increase in their children's recognition of letters after learning. The results imply that pre-primary school children may be more receptive to learning the alphabet and vocabulary than commonly perceived. In the context of Japan, although English writing instruction formally begins from the fifth grade of primary school at present, it may be possible that even younger children such as those in the third grade who formally receive instruction in English activities, may be susceptible to letter and vocabulary instruction.

Keywords : Pre-primary school children, English language learning, alphabet, vocabulary, primary school children

Introduction

Pre-primary education is defined as education involving children from the age of three to the age at which they receive primary education (Mourão, 2015b). Rixon (2013) mentions that English language learning is now being implemented for children at or before this age in many countries, and Japan is not an exception. According to a survey conducted by Benesse, 60%

 ¹⁾ 橋元 知子 東京未来大学こども心理学部(Tokyo Future University) hashimoto-tomoko@tokyomirai.jp
 2) 佐藤久美子 玉川大学・玉川大学大学院名誉教授(Emeritus Professor, Tamagawa University) kumi@lba.tamagawa.ac.jp

of private kindergartens and kodomoens (early childhood care and education facilities providing services from zero or one year old to six years old) that were surveyed taught English during regular childcare hours (Benesse, 2019). Hasegawa (2021) researched pre-primary English language learning at kindergartens in Sagamihara-shi in Kanagawa prefecture. He found that on average, English activities lasted 30 minutes for the fouryear-old and five-year-old classes once a week, often involving verbal reproduction of vocabulary and singing conducted by an external instructor. Based on observations that the researchers in this study have performed, the situation seems to be similar at other pre-primary schools where English activities are conducted. Writing does not appear to be emphasized at this stage, both by the pre-primary schools and the children's parents. For example, Hashimoto and Nakamura (2017) researched the emotions of kindergarteners' parents towards English and found that 92% of the parents were interested in "eliminating the negative sentiment" and "getting used to the sound and rhythm" of English, and only 47% answered that they were interested in their children "being able to write the alphabet and sentences" (p. 22). These results may be understandable considering the developmental stage of pre-primary school children. However, researchers of this study have often observed how children seem to enjoy being able to write their names and letters in English. Furthermore, in the current Course of Study for elementary schools in Japan which was fully implemented in 2020 (MEXT, 2017), the alphabet is now introduced in the third grade of primary school (alphabet instruction used to start in the fifth grade), and English writing begins in the fifth grade (this was formally introduced in elementary schools for the first time in the current *Course of Study*). Because listening and speaking are already being administered at many early childhood care and education institutions (Benesse, 2019), and due to the apparent interest shown in letters by many children before the official starting age, it may be worth examining the possibility of introducing the alphabet at earlier stages of development.

With this background, one of the authors of the current study created a learning material for pre-primary school children in collaboration with Gakken, a private Japanese company in education and the medical welfare business (Gakken, 2023). The learning material includes writing activities such as tracing letters, pointing to specific vocabulary as they are being read out loud, and matching illustrations with vocabulary. The learning material was developed to acquire the four skills (speaking, listening, reading, and writing) and five areas (speaking [presentation], speaking [interaction], listening, reading, and writing) which are in line with guidelines set forth by the current Course of Study for English language learning in primary school (MEXT, 2017).

The purpose of this study was to investigate whether pre-primary school children can develop skills in learning the alphabet and vocabulary and to examine if children's comprehensive skills in English could be detected through the implementation of this learning material. This was investigated through two strands: A literacy development test which examined students' knowledge of the alphabet and vocabulary, and a parental questionnaire on the perception of preprimary school children's interest in English.

Previous Studies

English activities conducted at pre-primary schools in Japan are often taught as a second language, with the children's first language being Japanese⁽¹⁾. Second language acquisition research for young learners, which often includes preprimary and primary school children, has been studied by researchers in the various disciplines of policy, pedagogy, and learning materials. In terms of policy, Johnstone (2019) examined English language guidelines chronologically from the 1950s to 2019, pointing to the important issues addressed, and significant themes that are often seen in early English language learning programs. Some issues mentioned in teaching English to young learners are whether an early start is better, the time allocated to teaching English, and the advantage in the status of English over other languages. The four themes that are addressed by Johnstone for policies to succeed are long-term planning, continuity between primary and secondary education, generalization throughout the country, and global collaboration in research. In the area of pedagogy of second language acquisition, Pinter (2017) introduces teaching methods of the four skills (listening, speaking, reading, and writing) in English to young learners. She suggests the use of interactional modifications of language to aid listening, teaching English in chunks to promote speaking, utilizing phonics to encourage reading, and introducing tracing with a finger to facilitate writing. Other themes involving young learners include picture books. Picture books have been used for many decades to teach young learners (Ghosn, 2013). This may be because picturebooks⁽²⁾ cover a variety of socially, culturally and historically appropriate material for the language classroom dealing with a myriad of themes, and of course bringing the cultures of many Englishes to our classrooms through the words and pictures they contain. (Mourão, 2015b, p. 203)

Mourão introduces the titles of a few picture books and presents ways to develop these to actively engage children in their learning. She suggests specific activities that bring out the educational potential of the material while considering the individual differences of each young learner.

Narrowing the scope to vocabulary, there appears to be much research conducted in the domain of second language acquisition (Schmitt, 2008). While this is still scarce for young learners (Hestetræet, 2019), there are some notable studies. For example, Orosz (2009) researched the English vocabulary size of learners in the first four years of primary school in Hungary. Findings revealed that learners were able to acquire vocabulary at a similar rate to peers in different countries (Orosz, 2009). Another study conducted is one in which Khorasgani (2017) researched Iranians aged between 6 to 7 years old who were learning English. This study compared two techniques in teaching languages to investigate which method was more effective in teaching new vocabulary: total physical response, and the keyword method. Results suggested that the keyword method was more useful than total physical response in vocabulary learning. Thus, although some research on children's vocabulary learning has been conducted, this is far from enough considering its importance in second or foreign language acquisition of young learners (Butler, 2019). Moreover, it is necessary to look further into this area of study because the significance of

developing vocabulary has become greater since the European Commission (2002) emphasized teaching a minimum of two foreign languages from an early age. The current study aims to contribute to this under-researched field by investigating pre-primary school children's interest in and mastery of the alphabet and vocabulary.

Research Method

Participants

Participants were 122 children in the fivevear-old classes (N = 122) and their parents at a private kindergarten in Okayama City, the capital of Okayama prefecture, located in the western part of Japan. Before the study, all parents had given consent for their children and themselves to take part in the research. However, only 50 parents (N = 50) answered the questionnaire before the study, although this number increased to 101 (N = 101) after the study. The children had been receiving English language instruction for two years prior to the current investigation using a digital device which they watched for 10 to 15 minutes a day at the kindergarten. Through the program, various vocabulary was introduced, which consisted of mostly nouns and adjectives covering various colors, vegetables, fruits, emotions, animals, and vehicles. The instructors were the homeroom teachers of the classes. However, parents perceived that their children's English abilities were not improving. This is why the kindergarten principal had asked the researchers in this study to assess and reorganize their program. The researchers did not survey the parents' socioeconomic status per a request made by the kindergarten director. However, the kindergarten is located in an affluent neighborhood and there is a strong possibility that the parents' interest in education is high compared to that of other areas in Okayama City. Some of the children had the experience of living abroad accompanying their parents who had been there on business. *Duration*

The study lasted for one academic year from April to March during regular kindergarten hours, five days a week, excluding holidays. Children had a month-and-a-half long summer holiday from July to August, and a two-week long winter holiday from the end of December to early January. The study duration consists of three phases: prelearning, while learning, and post-learning.

Procedure

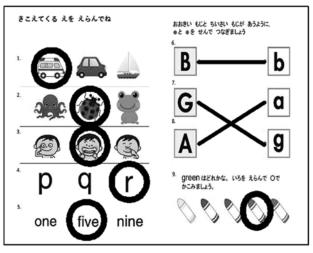
For the study, the children received 10 to 15 minutes of English language learning from Monday to Friday using the learning material, Gakken Kyoushitsu Eigo Kyouzai 10 kyuu (Gakken Classroom English Learning Material Level 10). English lessons were conducted by the classroom teachers. Contents included digital learning materials and handouts. The digital learning material introduced vocabulary and conversations in authentic situations to promote listening skills and contained the shadowing of chants aiming to increase children's speaking skills. For example, children would first watch a video, and repeat the words and key sentences that appeared in chants in the lesson. They would also sing a song containing the letters and phrases used in the video. After such activities, children would work on worksheets handed out by the classroom teacher. The worksheets focused on a certain alphabet (such as 'A'), which then introduced vocabulary that started with that alphabet (such as "apple", "ant", and 'airplane"). Children read and traced letters and vocabulary that encouraged the development of reading and

writing skills, and answered questions that tested their understanding through illustrations. The worksheets were checked by the classroom teacher and were stored to show the parents upon request. Other than viewing the digital content and repeating words in the video with the children, the teacher did not teach them any vocabulary or the alphabet.

Instruments

Two types of data were collected for the study. One was a nine-item literacy development test (one point each) conducted on the children as pre- and post-tests composed of the following: Listening to vocabulary and picking matching illustrations (Items 1-3), listening to sounds and connecting these with the appropriate alphabet and vocabulary (Items 4-5), connecting sets of uppercase and lowercase letters (Items 6-8), and hearing names of colors and choosing vocabulary with the proper spelling (Item 9) (a = .72). The reason why there were only nine items is because it was thought that the children would not be able to focus through the entirety of the test if there were more items. Figure 1 depicts the pre-test. The post-test was created at a similar level of English, although the content was different to reflect what the students had learned during their lessons.

The parental questionnaire was composed of two sections, Sections I and II. Section I contained four questions consisting of parents' perceptions about their children's interest in English (a = .81). Parents were asked to use a five-point Likert scale to rate each item (1 = strongly disagree, 2 =disagree, 3 = neither agree nor disagree, 4 =agree, 5 = strongly agree). Section II asked parents to choose noticeable behaviors of their children related to English language learning that



Note. Answers indicated.

Figure 1 Example of the Literacy Development Test

they recognized.

Once the literacy development test and parental questionnaire were created, they were checked and discussed by individuals specializing in linguistics, pre-primary and primary education, and English language education until a consensus was reached. The parental questionnaire is shown in the Appendix.

Results and Discussion

Literacy Development Test

The pre- and post-literacy development tests were analyzed using paired-sample *t*-tests. Table 1 shows the results of the descriptive statistics. Listening ability was analyzed using Items 1-5, the knowledge to recognize uppercase letters was checked through Items 6-8, the skill to choose vocabulary by illustrations was quizzed in Items 1-3 and 9, and the ability to point out lowercase letters and vocabulary was tested by Items 4-8. Furthermore, the tests were assessed comprehensively using the nine items comparing the pre-test and post-test.

		Pre-test		Post-test		
	п	М	SD	М	SD	t (121)
(i) Listening Recognition(Items 1-5)	5	3.5	1.69	3.6	1.82	-4.89
(ii) Recognizing Upper Case Letters (Items 6-8)	3	2.37	1.01	2.63	1.02	-3.27*
(iii) Choosing Vocabulary by Illustrations (Items 1-3, 9)	4	3.37	0.94	3.72	0.95	-3.88*
(iv) Choosing Lowercase Letters and Vocabulary (Items 4-8)	5	2.49	1.32	2.51	1.41	-4.51
(v) Comparing the Nine Items (Items 1-9)	9	5.87	2.92	6.23	1.69	-4.25

Analysis of Students' Literacy Development Tests

Note. *p < .05

Analysis of the pre- and post-tests indicated that there was a significant increase in test scores for "(ii) recognizing upper case letters," t (121) = -3.27, p < .05, and "(iii) choosing vocabulary by illustrations," t (121) = -3.88, p < .05. This indicates that children may have started to recognize the link between uppercase and lowercase letters and began to gain the skill of listening to letters and vocabulary and matching these with the appropriate characters. The results may be counterintuitive since most pre-primary English programs focus on activities such as drama, songs, rhymes, riddles, crafts, and games (Bourke, 2006) rather than on the acquisition of letters and vocabulary. Thus, one may not expect children to be capable of learning the alphabet. Although drama and songs are considered to support early learners' language acquisition (Mourão, 2015a), it may also be true that some children possess abilities to take on more difficult English tasks such as recognizing letters and vocabulary. As stated by Cameron (2003), "children can always do more than we think they can; they have huge learning potential, and the foreign language classroom does them a disservice if we do not exploit that potential" (p. xii). Many children in this study may have come under this category in English. Furthermore, children in this study appear to have come from families with high

Table 1

socioeconomic status as mentioned before. High socioeconomic status is known to affect the kind of education children receive in formal and nonformal education (e.g. Butler, 2015; Gao, 2012), which could have caused children in this study to have various educational opportunities since birth. *Parental questionnaire*

Results of Section I of the parental questionnaire did not show a significant increase in parental recognition of children's interest in English although descriptive statistics increased for all questions in Section I (Table 2). As mentioned before, the children had already been exposed to two years of English through the former English program. They may have already been familiar with English causing their observable interest in the language to remain unchanged despite the intervention. Parents could only rate according to what was observable. It is possible that non-observable interest in English could have increased, although this was not evaluated in this study. Furthermore, parents were not physically present when children were experiencing the Gakken program. Had the parents been able to monitor their children during the program, they may have rated differently.

Section II, which asked parents to pick household behaviors related to English language learning seen in children, suggested that more parents thought their children "a. can recognize letters" after learning than before (Pre-learning: $16\% \rightarrow$ Post-learning: 31%). Table 3 shows the aggregate and percentage of parental perceptions for each behavior, and Figure 2 shows this visually. Another item that showed an uptick is "b. knows a couple of simple vocabulary" (Prelearning: $31\% \rightarrow$ Post-learning: 34%). On the contrary, the percentage of parental perception of the following items declined: "c. sings English songs" (Pre-learning: $30\% \rightarrow$ Post-learning: 24%), "d. watches English cartoons" (Pre-learning: $14\% \rightarrow$

Table 2 Descriptive Statistics of Parental Recognition of Children's Interest in English (Section I)

	I-1		I-2		I-3		I-4	
Phases	М	SD	М	SD	М	SD	М	SD
Pre-learning	4.12	0.52	3.88	0.66	3.48	0.91	3.72	0.76
Post-learning	4.27	0.53	4.04	0.73	3.71	0.75	3.78	0.66

 Table 3
 Aggregate and Percentage of Parental Perception of Behaviors Related to English

 Language Learning Seen in Children (Section II)

	Pre-le	Pre-learning		
a. Can recognize letters	23	(16)	82	(31)
b. Knows a couple of simple vocabulary	45	(31)	90	(34)
c. Sings English songs	43	(30)	64	(24)
d. Watches English cartoons	21	(14)	12	(5)
e. Can repeat English sentences	11	(8)	15	(6)
f. Does none of the above	1	(1)	1	(0)
Total	144	(100)	264	(100)

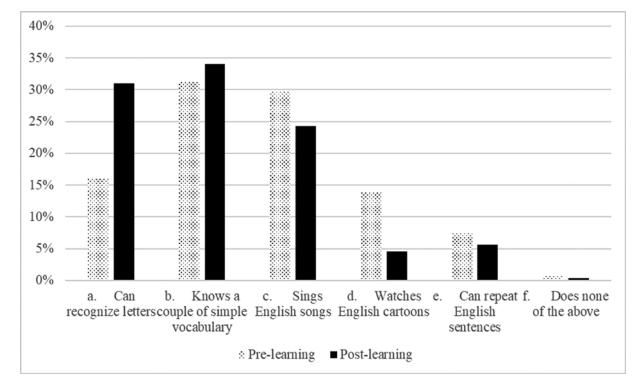


Figure 2 Chart Depicting Parental Perception of Behaviors Related to English Language Learning Seen in Children (Section II)

Post-learning: 5%), and "e. can repeat English sentences" (Pre-learning: $8\% \rightarrow$ Post-learning: 6%). These activities may not have been as cognitively challenging as recognizing letters and vocabulary. It is possible that simple tasks became too easy for children as their English skills developed, making them not choose to engage in these activities at home. Learners may have wanted to take part in assignments that had a deeper meaning and purpose for learning and required them to be more actively involved (Cameron, 2003). Although ideally, it is important to adjust instruction according to children's needs (Li et al., 2019) it may not always be possible to do so, especially when there are many students in a class.

Conclusion

This research investigated pre-primary school children's interest and mastery of the alphabet and vocabulary by validating the effects of Gakken Kyoushitsu Eigo Kyouzai 10 kyuu (Gakken Classroom English Learning Material Level 10). A literacy development test and a parental questionnaire were administered before and after their learning. The data were analyzed to measure the outcomes of the learning material. The results suggested that children seem to have recognized the connection between uppercase and lowercase characters as well as gained an understanding of listening to letters and vocabulary and connecting these with the proper characters. Additionally, parents seem to have noticed an increase in their children's recognition of and interest in the alphabet after learning than before. Findings imply that pre-primary school children may be more receptive to learning the alphabet and vocabulary than commonly

perceived. Bringing this into the context of Japan' s educational policy, although the current *Course* of *Study* introduces English writing from the fifth grade of primary school (MEXT, 2017), it may be possible that even younger children such as third graders of primary school, when English activities are formally introduced into the curriculum, or even those as early as in pre-primary school, may be susceptible to letter and vocabulary instruction.

(1) researchers of this study recognize that for pre-primary school children who are simultaneously learning two languages, English may be their dual language. However, because Japanese is most often the conventional language at home in Japan, English is referred to as the second language.

(2) although "picture book" is more common, "picturebook" is used as this is the spelling employed in the reference.

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Appendix

Parental Questionnaire

- (The original questionnaire was in Japanese. This was translated into English by the first author.)
- Section I. On a scale from $1 \sim 5$ (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree) please rate your child's recent English learning experience.
- I-1. My child likes or is interested in English
- I-2. My child shows an interest in letters in his/her daily life
- I-3. My child is interested in letters and writes them
- I-4. My child has good pronunciation of English

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Section II. Please pick all that apply to your child.

a. Can recognize letters

- b. Knows a couple of simple vocabulary
- c. Sings English songs

- d. Watches English cartoons
- e. Can repeat English sentences
- f. Does none of the above

(はしもと ともこ・さとう くみこ)

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