

# Using Picture Storybooks in Elementary School English Classes: University Students' Views During a Teacher Training Course<sup>1</sup>

Kazunari SHIMADA

Liberal Arts Education Center

## *Abstract*

This study investigated the views of Japanese university students regarding the use of printed and digital picture storybooks in a classroom during a teacher training course. A total of 29 undergraduate students enrolled in a two-semester course were asked to complete a questionnaire, designed to assess their views about reading English picture storybooks aloud and using English digital picture materials in teaching elementary school students. The results revealed that although most students preferred to use both paper-based and digital materials, some found it difficult to understand their classmates' storytelling due to their use of unfamiliar words and phrases. However, students who preferred to use printed picture storybooks discovered various possibilities for improving their listeners' comprehension by using various gestures and changing their voice inflections. Many students found the digital picture storybooks easy to use because they included audio and simple expressions.

*Keywords: picture storybook, digital picture materials, teacher training course*

## **1. Background and Purpose of the Study**

In recent years, the digitisation of teaching materials has increased in many advanced countries. According to the report by the Japanese Ministry of Education, Culture, Sports, Science and Technology (2021), the Korean Government started an information and communication technology (ICT) education plan (SMART education plan) in 1996 that provided every elementary and secondary school student with opportunities of using digital learning materials since 2015. The report also states that, in Singapore, the 'FutureSchools@Singapore' project enabled the pilot research schools to use digital textbooks in 2007 and has facilitated their wide spread use in elementary and secondary schools.

In Japan, the Ministry of Education, Culture, Sports, Science and Technology announced a vision to enhance

ICT education in 2011. In that context, the Japanese Ministry launched both paper-based and digital textbooks for elementary school in both foreign language activities and English classes. *Hi, friends! Story Books* (2016), *Let's Try! 1* (2018a), and *Let's Try! 2* (2018b) were designed for third- and fourth-grade students, and *We Can! 1* (2018c) and *We Can! 2* (2018d) were for fifth and sixth graders, respectively. Additionally, the number of digital picture storybooks for elementary school English classes has grown.

Some researchers have found that digital picture storybooks could have a positive effect on the language learning skills of students. Kao et al. (2016) conducted an experiment to investigate the effects of digital storybooks with interactive features. The results showed that an interactive digital storybook improved the reading motivation and story comprehension of first

language (L1) elementary school students in Taiwan. Similarly, Shu et al. (2007) found that digital picture books helped Japanese elementary school students (fifth-grade students) improve their motivation levels for learning English. As for vocabulary, Verhallenn and Bus (2010) found that the use of digital storybooks had a positive impact on the vocabulary acquisition skills of five-year old immigrant children while learning Dutch.

Many printed picture storybooks have been used in elementary English as a foreign language (EFL) classrooms. Storytelling with printed picture storybooks is a popular method to draw the attention of elementary school students towards English language learning (e.g., Hatae, 2012; Matsumoto, 2017). In the present circumstances, teachers are needed to make use of both digital and printed materials in the classroom.

During teacher training courses, university students must learn how to use picture storybooks as well as textbooks. Although some previous studies (e.g., Nahatame, 2014; Tanaka et al., 2013) have surveyed the awareness of foreign language activities in students, few studies have investigated the views of university students regarding the use of picture storybooks in elementary English classrooms.

Therefore, this study aims to investigate the views of the university students in Japan regarding the use of digital and printed picture storybooks in a classroom during a teacher training course in the context of the demand for using both types of materials.

## 2. Method

### 2.1 Participants

Twenty-nine undergraduates from a private university in Gunma participated in this study. They took a teacher training course to learn practical skills for teaching English in elementary school. Fifteen of them took the course from April to July 2018, and 14 took the same course from April to July, 2019. They had a lower-intermediate proficiency in English, which is equivalent to a TOEIC® score of 365 to 500. They were

requested to teach English using both digital picture material and printed picture storybooks in a five-week training programme.

### 2.2 Materials

The digital picture material used in the course was *In the Autumn Forest*, which is included in *Hi, friends! Story Books* (Ministry of Education, Culture, Sports, Science and Technology, 2016), a DVD package. The picture storybook consists of 32 pages and is about 8 minutes long in auto-play mode. The storybook features animals playing hide-and-seek in a forest.

Additionally, five printed picture storybooks were used in the course, the titles of which are as follows:

*Three Billy-Goats* (Arengo & Aguilar, 2011)

*The Enormous Turnip* (Arengo & Salgado, 2011)

*The Magic Cooking Pot* (Arengo & Allyn, 2012)

*The Shoemaker and the Elves* (Arengo & Aranda, 2012)

*The Lazy Grasshopper* (Bladon & Robert, 2014)

They were selected from the series of popular Oxford classic tales, and each consisted of 19 pages of text and pictures, with exercises and a picture dictionary. They were retold at a 100 headword level.

### 2.3 Procedure

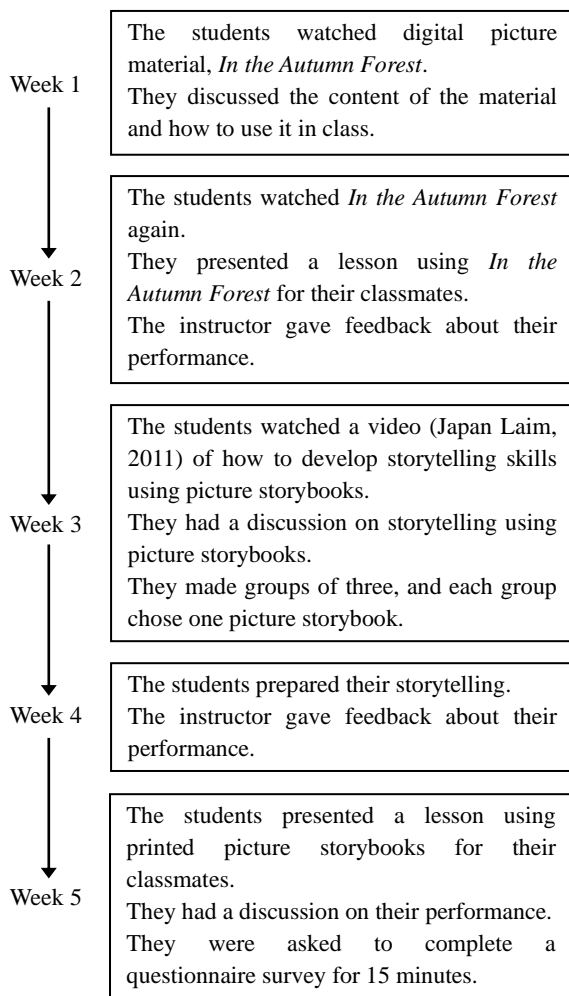
This study was conducted over a period of five weeks (see Figure 1). The students were requested to teach English using both *In the Autumn Forest* and printed picture storybooks. For the first and second weeks, the students watched *In the Autumn Forest*, and learned how to use the digital picture material in the classroom, and presented a lesson using such material.

In the following week, the students watched an instructional video (Japan Laim, 2011) that included demonstrations of storytelling using a printed picture storybook by an experienced teacher, and learned how to use printed picture storybooks. Afterwards, the students prepared their stories and presented a lesson using

picture storybooks for their classmates.

Following the sessions, they were asked to complete a questionnaire survey with 11 items rated on a five-point Likert scale designed to assess their views on reading aloud of English picture storybooks and the use of English digital picture materials in teaching elementary school students. The data were analysed both quantitatively and qualitatively.<sup>2</sup>

Figure 1  
Procedure of the Five-week Training Programme in This Study



### 3. Results

#### 3.1 Lexical statistical features and readability scores

To check the lexical features of the picture storybooks, the types and tokens were computed using AntConc 3.5.9 (Anthony, 2020). The type-token ratio (TTR) was calculated as a measure of vocabulary richness: the higher the ratio, the richer the vocabulary.

Additionally, Flesch-Kincaid grade levels were also calculated to assess the readability of each storybook. The statistics were shown in Table 1.

Table 1  
Lexical Statistical Features and Readability Scores

	AF	TBG	ET	MCP	SE	LG
Tokens	222	544	397	678	617	615
Types	61	92	48	128	148	136
TTR	27.5	16.9	12.1	18.9	24.0	22.1
Flesch-Kincaid	0.0	0.0	0.0	1.1	1.1	1.4

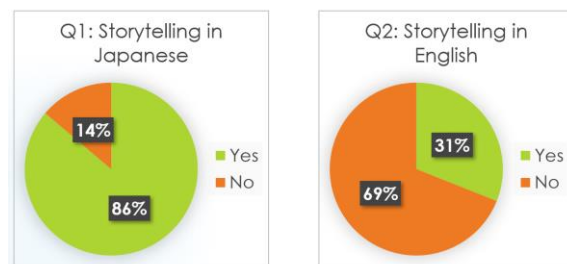
Note. AF = *In the Autumn Forest*; TBG = *Three Billy-Goats*; ET = *The Enormous Turnip*; MCP = *The Magic Cooking Pot*; SE = *The Shoemaker and the Elves*; LG = *The Lazy Grasshopper*.

The TTR in *In the Autumn Forest*, *The Shoemaker and the Elves* and *The Lazy Grasshopper* were higher; thus, the three picture storybooks had a slightly richer vocabulary. As for the readability scores, each picture storybook was easy to read, but *The Shoemaker and the Elves* and *The Lazy Grasshopper* were more difficult to read than any other picture storybook.

#### 3.2 Students' experience and knowledge of picture storybooks

The questionnaire comprised 19 items about storytelling using picture storybooks and digital picture material. The first and second questions were about exploring the students' experience of storytelling using picture storybooks. Although most students had experienced storytelling in Japanese, they had never tried storytelling using picture storybooks in English (see Figure 2).

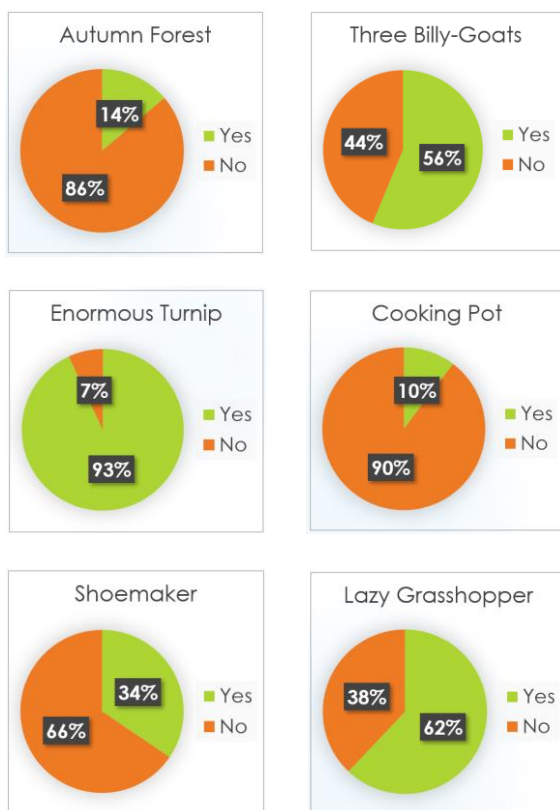
Figure 2  
Experience of Storytelling



Additionally, the students were asked whether they knew the story of each picture storybook (see Figure 3).

Figure 3

*Do You Know the Story of the Picture Storybook?*  
(Q3 and Q13)



Most students did not know the digital picture storybook, *In the Autumn Forest*. As for the printed picture storybooks, many students did not know *The Magic Cooking Pot* and *The Shoemaker and the Elves*, while most students knew *The Enormous Turnip*.

### 3.3 Students' views on the use of printed picture materials

Before presenting a lesson using printed picture storybooks, the students watched a model lesson and prepared for storytelling with their classmates. Table 2 shows their responses to the questions relating to the preparation process. The responses to each of the questionnaire item ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Table 2

*Preparation for Storytelling Using Printed Picture Storybooks*

Questionnaire items	M	SD	Min	Max
Q4. Watching the video of a model lesson was helpful in preparing for storytelling.	4.76	.44	4	5
Q5. Group learning was helpful in preparing for storytelling.	4.76	.51	4	5

As shown in Table 2, the students appreciated the preparatory work. Most students were satisfied preparing with the model lesson video and enjoyed preparing for their performance in groups.

Table 3 summarises the students' views on printed picture materials after presenting a lesson using them.

Table 3

*Students' Views on the Use of Printed Picture Materials*

Questionnaire items	M	SD	Min	Max
Q6. I think that I understood the content of the picture storybook that my group read.	4.83	.38	4	5
Q8. I think that I understood my classmates' storytelling.	4.00	.76	2	5
Q10. I think that the vocabulary level of the picture storybook is appropriate in elementary English classrooms.	3.90	.67	2	5
Q11. I think that the level of grammar and expressions in the picture storybook is appropriate in elementary English classrooms.	4.07	.70	2	5

As shown in the responses to questionnaire items 6 and 8, although most students understood the content of the picture storybooks, some had difficulty understanding their classmates' storytelling. Some students noted that, with regard to the levels of the picture storybooks, the levels of vocabulary, grammar, and expressions were not suitable for elementary English classrooms in their responses to items 10 and 11.

These views were supported by the comments of the students, which they were asked to write in

questionnaire items 7 and 9. The following comments are excerpts (translation mine):

- (1) I understood the content of the picture storybook partly because I knew the story but mostly because I read the storybook aloud with my classmates many times.
- (2) It was easy to understand the picture storybook because I knew the story well.
- (3) It was difficult to understand my classmates' storytelling because I didn't know the story.
- (4) I didn't catch unfamiliar words and phrases in my classmates' storytelling.
- (5) I didn't understand the whole story, but my classmates' gestures and voice inflections helped me understand the story's plot.

While comments (1) and (2) indicate that some students could understand the picture storybooks because of their knowledge and preparatory work, comments (3) and (4) confirm the response to questionnaire item 8. Whereas, comment (5) suggests that using gestures and changing voice inflection could improve the listeners' comprehension.

### 3.4 Students' views on the use of digital picture materials

Table 4 summarises the students' views on digital picture material after presenting a lesson using *In the Autumn Forest*.

Table 4  
*Students' Views on the Use of Digital Picture Materials*

Questionnaire items	M	SD	Min	Max
Q14. I think that I understood the content of the digital picture storybook.	4.66	.48	4	5
Q16. I think that the vocabulary level of the digital picture storybook is appropriate for elementary English classrooms.	4.48	.51	4	5

Table 4 (cont'd)

Questionnaire items	M	SD	Min	Max
Q17. I think that the level of grammar and expressions of the digital picture storybook is appropriate for elementary English classrooms.	4.45	.51	4	5

Many students thought that the digital picture materials were easy to understand and appropriate for elementary English classrooms. The following comments as responses to item 15 reflect these views:

- (6) The digital picture story was easy to understand because the pictures were clear and the English was very easy.
- (7) I like the digital material because the pronunciation of the narrator was very clear and the speed of the storytelling was slow.
- (8) The words used in the digital picture story were very easy to understand.
- (9) The digital pictures with subtitles helped me understand the story.

These comments show that the students understood the digital material well and gave their performance by taking advantage of ICT. Among them, comments (6), (7), and (8) indicate that clear and easy English could help the students use the digital material.

### 3.5 Picture storybooks as teaching materials in elementary English classrooms

Table 5 shows whether the students in the teacher training course would use picture storybooks as teaching material for elementary school foreign language activities and English classes.

The responses to questionnaire items 12 and 18 revealed that the five-week training programme enhanced the students' positive attitudes towards using printed and digital storybooks.

Table 5  
*Do Students Want to Use Picture Storybooks in Elementary English Classrooms?*

Questionnaire items	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Q12. I think that I will use picture storybooks to teach English to elementary school students.	4.59	.57	3	5
Q18. I think that I will use digital picture storybooks to teach English to elementary school students.	4.48	.57	3	5

The results in Table 5 were supported by the comments of the students in questionnaire item 19:

- (10) I think that both styles of storytelling have their own advantages and disadvantages; therefore, it is necessary to consider them and incorporate them into the class while combining them appropriately.
- (11) I would like to read the printed picture books aloud while watching the listeners' reactions.
- (12) Digital picture books are good because you can listen to the clear and correct pronunciation of words.
- (13) Although I would like to use digital picture books, I think that hearing teachers and ALTs read them would be more interesting for children.

Each comment suggests that the training programme also helped the students understand the features of printed and digital picture materials. As observed in comment (10), some students recognised the importance of using both types.

#### 4. Discussion and Implications

As a result of the analysis in Section 3, there was some variation in vocabulary richness and readability among the paper-based picture storybooks. In addition, it was suggested that unfamiliar picture storybooks may affect students' comprehension of storytelling.

Those students who preferred to use printed picture

storybooks identified several possibilities for improving their listeners' comprehension by using various gestures and changing their voice inflections. Conversely, many students found it effortless to use digital picture storybooks as they included audio and simple expressions.

The findings of the study suggest that picture storybooks should be chosen according to the level of vocabulary difficulty and that a well-balanced use of both types of materials could aid teachers in conducting picture storytelling activities in their elementary English classrooms.

The major limitation of this study is that a limited number of participants and materials were involved, therefore making it necessary to increase these elements to obtain more reliable and valid findings. Additionally, when comparing printed and digital storybooks, I could not confirm which type of teaching materials, with the same story content, university students preferred. Therefore, the research design and training programme should be modified for future research.

#### Notes

1. An earlier version of this paper was presented at the 46th Kantokoshinetsu Association of Teachers of English Annual Convention in Tochigi, on 10 December 2022 (virtual conference). This abstract was based on an abstract presented by the author at the conference.
2. The data from the 29 participants were analysed with their consent in the present study. No items in the questionnaire were left unanswered.

#### References

- Anthony, L. (2020). *AntConc* (Version 3.5.9) [Computer software]. Waseda University.  
<https://www.laurenceanthony.net/software>
- Hatae, M. (2012). Shogakko gaikokugo katsudo ni okeru eigo ehon no katsuyo: komyunikeishon nouryoku no soji wo hagukumu tame ni [Using English

- picture books in elementary school English activities: To form the foundation of pupils' communication abilities]. *SELES Journal*, 32, 17–28. [https://doi.org/10.32276/seles.32.0\\_17](https://doi.org/10.32276/seles.32.0_17)
- Japan Laim. (2011). *Koukishin wo shigeki suru ehon wo tsukatta shogakusei no eigo katsudo* [English activities for elementary school students using picture storybooks to stimulate their curiosity] [Educational DVD]. Japan Laim.
- Kao, G. Y.-M., Tsai, C.-C., Liu, C.-Y., & Yang, C.-H. (2016). The effects of high/low interactive electronic storybooks on elementary school students' reading motivation, story comprehension and chromatics concepts. *Computers & Education*, 100, 56–70. <https://doi.org/10.1016/j.compedu.2016.04.013>
- Matsumoto, Y. (2017). Eigo ehon no yomikikase noshintaisei to kikite no rikai (2): Shogakko eigo ni okeru eigo ehon noshintaisei wo ikashita yomiai no kokoromi [Reading English picture books with an application of non-verbal communication at Japanese public elementary schools]. *Tamagawa University Research Review*, 23, 7–17.
- Ministry of Education, Culture, Sports, Science and Technology. (2018a). *Let's try! 1*. Tokyo Shoseki.
- Ministry of Education, Culture, Sports, Science and Technology. (2018b). *Let's try! 2*. Tokyo Shoseki.
- Ministry of Education, Culture, Sports, Science and Technology. (2018c). *We can! 1*. Tokyo Shoseki.
- Ministry of Education, Culture, Sports, Science and Technology. (2018d). *We can! 2*. Tokyo Shoseki.
- Ministry of Education, Culture, Sports, Science and Technology. (2021). Shogaikoku ni okeru dezitaru kyokasho kyozaï no shiyojokyo ni tsuite [Use of digital textbooks and teaching materials in other countries]. [https://www.mext.go.jp/content/20210126-mxt\\_kyokasyo01-000012375\\_01.pdf](https://www.mext.go.jp/content/20210126-mxt_kyokasyo01-000012375_01.pdf)
- Nahatame, S. (2014). Shogakko kyoin wo shibou suru daigakusei no eigo katsudo ni kansuru ishikichosa [A survey of university students' awareness concerning English activities at elementary school: Focusing on students who aspire to be teachers]. *JES Journal*, 14, 131–146. [https://doi.org/10.20597/jesjournal.14.01\\_131](https://doi.org/10.20597/jesjournal.14.01_131)
- Shu, B., Komiyama, M., Furui, Y., & Hayami, H. (2007). Shogakusei muke dezitaru ehon shisutemu wo mochiita gakushu koka no kensho [Experimental verification of the effect on learning with the digital picture-book teaching-material system]. *IP SJ SIG Technical Report, GN*, 32, 103–108.
- Tanaka, M., Honda, M., Osada, E., & Nishi, N. (2013). Jido eigo kyoin yosei katei rishusha no kyoshi ninchi no kosatsu kara erareru shidosha yosei puroguramu kaizen eno shisa [Implications from changes made for pre-service teacher training program for teaching English to children: From the perspectives of teacher cognition]. *KATE Journal*, 27, 85–98. [https://doi.org/10.20806/katejournal.27.0\\_85](https://doi.org/10.20806/katejournal.27.0_85)
- Verhallen, M. J. A. J., & Bus, A. G. (2010). Low-income immigrant pupils learning vocabulary through digital picture storybooks. *Journal of Educational Psychology*, 102(1), 54–61. <https://doi.org/10.1037/a0017133>

### Picture Storybooks used in This Study

- Arengo, S., & Aguilar, S. (2011). *Three Billy-goats*. Oxford University Press.
- Arengo, S., & Salgado, A. (2011). *The enormous turnip*. Oxford University Press.
- Arengo, S., & Allyn, V. (2012). *The magic cooking pot*. Oxford University Press.
- Arengo, S., & Aranda, O. (2012). *The shoemaker and the elves*. Oxford University Press.
- Bladon, R., & Robert, B. (2014). *The lazy grasshopper*. Oxford University Press.
- Ministry of Education, Culture, Sports, Science and Technology. (2016). *Hi, friends! story books* [Computer software]. Ministry of Education, Culture, Sports, Science and Technology.

## 小学校の英語授業における絵本の使用 ——教職課程履修中の大学生の見解——

嶋田和成

共通教育センター

### 概要

本研究は、教職課程の授業において、紙媒体の絵本とデジタル絵本の使用に関する日本人大学生の見解を調査したものである。2 学期分の計 29 名の学部生に、小学生に指導する場合を想定した英語絵本の読み聞かせと、英語のデジタル絵本教材を使った模擬授業を行ってもらい、それらの教材に関する意見を聴取するアンケートを実施した。その結果、ほとんどの学生は紙媒体の絵本とデジタル絵本の両方を使用することを好んだが、一部の学生は、紙媒体の絵本で馴染みのない単語やフレーズが使用されたために、クラスメートの読み聞かせを理解するのが難しいと感じた。しかし、紙媒体の絵本の使用を好む学生は、色々なジェスチャーを使用したり、声の抑揚を変えたりすることで、聞き手の理解を向上させる様々な可能性を発見した。その一方、デジタル絵本に関しては、音声付きで簡単な表現が含まれているため、使いやすいという意見が多かった。

原稿受付日 令和5年2月16日