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SEQUENTIAL ANALYSES OF JAPANESE ELEMENTARY SCHOOL ENGLISH CLASSROOM TURN-TAKING

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ABSTRACT

This study examined the English utterances of elementary school students using a small-scale spoken corpus that we compiled from English classes for the fifth graders at a public elementary school and a university-affiliated elementary school in Japan. We categorized the corpus data by instructor and pupil turns based on the target language use and information gap categories and then analyzed the coded turns sequentially, focusing on the communicativeness of the sequences. The coded turns revealed the instructor turns' dominance over the pupils' turns and the pupils' significant use of English responses to display questions. However, the results also revealed that the instructors' English initiations did not necessarily provoke pupils' English responses and that pupils' responses to referential questions varied between English classes based on target language use. The findings of this study imply that instructors should be encouraged to use more English in initiating their turns to elicit pupils' unpredictable English responses and facilitate more voluntarily communicative interactions in elementary school English classes.

KEYWORDS

Sequential analyses, interaction, information gap

INTRODUCTION

The new Course of Study (CS) that will be implemented in 2020 makes English instruction mandatory in elementary schools in Japan, aiming to cultivate a foundational attitude toward oral communication (MEXT, 2017). It will require that elementary school English classes include interactions (*yaritori* in Japanese, which literally means oral exchange of ideas) between teachers and pupils as well as among pupils. Elementary school teachers, in most cases homeroom





teachers (HRTs), should also teach *happyo*, meaning announcing or presenting in English. The upcoming amendment to the current CS (MEXT, 2008) shows a pedagogical shift in at least two respects. First, the current CS introduced “Foreign Language Activities (FLA)” —in principle, the English language—to the elementary school curriculum in 2011. FLA’s overall objective was to “form the foundation of pupils’ communication abilities through foreign languages... while ... familiarizing pupils with the sounds and basic expressions of foreign languages” (MEXT 2010). Second, the current CS designates English teaching in elementary schools as a non-subject, which means it requires no testing and thus current English teaching in elementary schools technically involves neither evaluation nor grading. Therefore, much has yet to be examined regarding actual academic achievement results, including the results of the nation-wide academic achievement test, “the National Assessments of Academic Ability,” conducted by the National Institute for Educational Policy Research (NIER, 2018) every year.

LITERATURE REVIEW

Although we need to wait for several more years before the MEXT’s Nationwide Academic Achievement Survey to analyze the outcomes of English teaching in elementary schools such as pupils’ basic interaction and presentation skills, researchers have conducted several studies regarding elementary school English language teaching. Machida, Takahashi, and Kurokawa (2017) examined the benefits of team teaching involving two-way communication and found that their pupils’ scores measured on the Test of English as a Foreign Language (*TOEFL Primary*®) improved. Researchers have also examined ways to increase pupils’ motivation. For example, Ikegami (2018) showed that integrating a unique storytelling method along with classroom activities enhanced pupils’ learning motivation.

Ohashi and Katagiri (2017) examined FLA lessons in elementary schools focusing on the types of instruction teachers gave while interacting with pupils. They found that explicit instructions led pupils to understand and remember English phrases more effectively than mere explanations involving no oral interactions with the pupils. Katagiri and Ohashi (2017) quantitatively investigated English language (L2) use as compared with Japanese language (L1) use by compiling a mini spoken corpus from conventional FLA lessons, once a week, in an elementary school and English language lessons where the prior implementation of English language teaching was allowed. They found that approximately 60% of elementary school teachers’ utterances were comprised of L2 use, while the pupils tried to maintain L2 discourse during their teachers’ L2 interactions with them. Katagiri and Ohashi (2018) deepened their corpus of spoken utterances in elementary school English classes by examining the lexical items in the spoken corpus. They found that elementary school teachers use common L2 vocabulary items regardless





of school type (public schools or university-affiliated schools) and subject category (English language activities or English language as a subject).

In some Japanese English classes, we have observed assistant language teachers (ALTs) helping Japanese teachers of English (JTEs) by speaking L2 as L2 speaker models to expose pupils to L2, specifically to demonstrate authentic L2 discourse and to serve as native speakers and cultural informants. ALTs have worked with JTEs since the initiation of the Japan Exchange and Teaching (JET) Programme, which has invited native speakers to help improve Japanese English education since 1987 (JET, 2019); they started to be introduced into the FLA to team-teach with HRTs after the current CS for elementary schools was announced in 2008, and the FLA became mandatory in 2011. However, studies have revealed several issues with HRTs at elementary schools related to team teaching with the ALTs. For example, Kano and Ozeki (2018) conducted a nation-wide survey of ALTs ($N = 1,807$) working in Japanese schools. Six hundred fifty-six of them worked at Japanese elementary schools, and 48% of them reported that they had problems with JTs. Approximately half of the negative responses concerned JTs seldom speaking L2 (English) and JTs being unable to understand L2.

Previous studies have attempted to shed light on elementary school English language education in Japan. However, researchers have yet to clearly determine what interactions are taking place in current teaching contexts and how beneficial such interactions are in facilitating pupils' English communicative skills.

RESEARCH QUESTIONS

The findings of previous studies highlight the need to determine the level of communicativeness in the pupils' use of L2 and whether or how willingly elementary school pupils communicate in English with their teachers or peers. It would be beneficial to understand the founding mechanics of English interactions at a fundamental level for not only elementary school English teachers and their pupils but also for teacher trainers and administrators. Therefore, we posed the following two research questions with the aim of generating answers that will help enhance English interaction skills in elementary school English lessons.

RQ 1 How communicative are elementary school pupils' L2 utterances?

RQ 2 What instructor utterances trigger the pupils' communicative L2 utterances?





METHODOLOGY

Participants and Materials

We compiled a small-sized corpus by collecting utterances in six English classes for fifth graders from two elementary schools in Japan, one a public school and the other a university-affiliated elementary school. The study participants were in-service teachers; we asked them to record their English classes, and they contributed their recorded spoken data after signing consent forms. The corpus contained utterances in FLA classes under the current CS, which would last until March 2020, and those in English classes as a subject were allowed a prioritized start before the MEXT enacts the new course of study in April 2020. Two Japanese HRTs and two English-native assistant language teachers (ALTs) taught the English classes. The plain texts from the corpus were utilized with the speakers' mark-ups. The mark-ups showed whether the HRTs, the ALTs, or the pupils made the utterances. We sorted the marked-up utterances (the plain texts) by the speakers' mark-ups, which enabled us to analyze by speaker turns with the discourse analysis schemes described in the sub-sections below.

Methods and Procedures

We tabulated the plain texts by speaker turns in the adapted Communicative Orientation of Language Teaching (COLT) Part B (Katagiri & Kawai, 2015) to numerically encode the verbal interactions of the speakers, i.e., the elementary school HRTs, the ALTs, and the pupils (refer to Spada and Fröhlich, 1995 for the original COLT Part B coding schemes). Table 1 lists the coding features of the target language use and information gap categories and their respective coding numerals. We used the "target language use" feature, i.e., whether the utterances were in L1 (Japanese), L2 (English), or a mixture of L1 and L2, coded as 1, 2, or 3, respectively. Thus, the coding numerals 1, 2, and 3 represent L1 (Japanese), L2 (English), and Mix (the mixture of L1 and L2) and since the target language use involved three categories, the coding numeral 4 had no equivalent category for this feature. The information gap coding distinguishes utterances based on two criteria: (a) whether the utterances asked questions¹—pseudo requests (display questions) or genuine requests (referential questions); or (b) whether the utterances gave predictable information² (oral responses to display questions) or unpredictable information (responses to referential questions).



Table 1: Modified COLT Part B Verbal Interaction Coding Features and Coding Numerals

Coding Numeral	Target language use	Information gap
		Giving information
1	L1	Predictable
2	L2	Unpredictable
		Requesting information
3	Mix	Pseudo
4	-	Genuine

Note. L1 = Japanese. L2 = English. Mix = mixture of L1 and L2.

(Adapted from Katagiri & Kawai, 2015, p. 28)

Each category in the first feature (target language use) was represented by one numeral, either 1, 2, or 3, and the categories in the second feature (information gap) were coded using additional numerals, 1 through 4 according to the information gap categories. Figure 1 shows a coding scheme and a sample coding representation.

We concatenated these two numerals in two-digit numerals to designate the verbal interaction features unique to the speakers (see the middle two columns “Instructor turn coding” and “Pupil turn coding” in Figure 1). We added “Language sequence” categories to the coding scheme for our analyses (see Table 2 and the left column in Figure 1).

Language sequence code					TEACHER VERBAL INTERACTION		STUDENT VERBAL INTERACTION	
				Coding number	Target language	Information gap	Target language	Information gap
A: L1→L1				1	L1	Giving Info. Predict.	L1	Giving Info. Predict.
B: L2→L1				2	L2	Giving Info. Unpredict.	L2	Giving Info. Unpredict.
C: L2→L2				3	Mix	Request Info. Pseudo requ.	---	Request Info. Pseudo requ.
D: L1→L2				4		Request Info. Genuine requ.	---	Request Info. Genuine requ.
Speaker mark-up	Utterances	Instructor turn coding	Student turn coding					
<?xml version="1.0" encoding="utf-8"?>					2	3		
<body>								
	ALT: Okay, how are you today?	24			2	4		
	ST: How are you?		23				2	3
	ALT: Tired?	24			2	4		
	ST: How are.		21				2	1
A: L1→L1								
	ALT: いない？[Are you with me?]	14			1	4		
	ST: 二重跳びで疲れた。[I've got tied from double skipping.]		12				1	2

Figure 1: Utterances tabulated on the adapted COLT Part B scheme with numerical coding on a Microsoft Excel spreadsheet.



Table 2: Teacher-Pupil Interaction Sequence Coding by Language Use

Interaction sequence coding	Language use		
	Teacher elicitation	→	Pupil response
A	L1	→	L1
B	L2	→	L1
C	L2	→	L2
D	L1	→	L2

This meta-analysis category detailed the verbal interactions by enabling us to have a bird's eye view of the teacher-pupil or pupil-pupil discourses to predict the pupils' communicative L2 interactions, helping us to facilitate relatively more L2 use by both teachers and the elementary school pupils.

Figure 2 shows the enhanced image of the coded utterances. The instructor (ALT) initiated the turn by asking what kind of books the pupil read. The pupil responded in the next turn by saying, “わかんない (*wakannai*),” literally meaning “I do not understand.” We coded these two turns in the sequence as *B* (the pupil's L1 response followed the instructor's L2 initiation). The teacher's L2 initiation failed in the sense that it did not extract an L2 response from the pupil.

Speaker mark-up	Utterances	Instructor turn coding	Student turn coding
B: L2→L1			
ALT:	Books. What kind of books do you like to read?	24	
ST1:	わかんない。[I do not understand.]		12

Figure 2: Enhanced image of the turn sequence that failed to extract a pupil L2 response.

However, the following sequence was regarded as successful because the pupil responded in L2 following the instructor's L2 initiation, and thus we coded it as *C* (Figure 3).



Speaker mark-up	Utterances	Instructor turn coding	Student turn coding
C: L2→L2			
JT:	Yes. Do you have any favorite character?	24	
ST2:	<pause/>		
ST2:	Ghost.		22
ALT:	OK. OK. I, too like ghost. But I like ah,	21	

Figure 3: Enhanced image of the turn sequence that succeeded in extracting the pupil L2 response.

We quantified the numerically coded data with qualitative values in terms of verbal interactions, examined the use of the language, and analyzed the verbal interactions together with the sequential analyses. The next section describes the results and analyses.

RESULTS AND DISCUSSION

This section reports the results of the coding of the turns, analyses of pupils' target language use and information gap features, and sequential analyses of the teacher-pupil discourses. We aligned the sets of results and analyses so that the quantitative results would reveal the characteristics of the elementary school English classes, leading to reasonable answers to the RQs.

Turns and Information Gap Features

Table 3 summarizes the total number of turns collected from the corpus. It shows the dominance of the instructor turns over pupils. Instructors significantly dominated the turns over pupils in all the classes ($p < .01$) except for Class Y5(1).

Table 3: Turn Quantity of Instructors and Pupils

Class ID ^a	Number of turns		Chi-squared test results
	Instructors	Pupils	
Y5(1)	489	513	$p = 0.2337$ <i>ns</i>
Y5(2)	382	233	$p = 0.0000$ **
Y5(3)	358	207	$p = 0.0000$ **
Y5(4)	349	160	$p = 0.0000$ **
Y5(5)	301	97	$p = 0.0000$ **
Y5(6)	243	137	$p = 0.0000$ **

Note. ^aIn the first column, "Y" indicates an elementary school grade, and the parenthesized numerals indicate the serial class ID numbers. For example, "Y5(1)" represents the 5th grade in elementary school, and the first lesson in our elementary school English spoken corpus. Y5(1)



and Y5(2) are public elementary school classes, and the remaining four classes Y5 (3) – Y5 (6) are affiliated elementary schools.

We sub-divided the two information gap categories, giving information and requesting information, into two features (Table 1). Tables 4 and 5 show the results of these two information gap categories by the turns of the instructors (JTs and ALTs) and those of the pupils, respectively.

Table 4: Statistical Test Results of the Number of Instructor Information Gap Turns

Class ID	Giving Information	Requesting Information	Chi-squared test results
Y5(1)	269	136	$p = 0.0000$ ** ($p < .01$)
Y5(2)	302	61	$p = 0.0000$ ** ($p < .01$)
Y5(3)	257	85	$p = 0.0000$ ** ($p < .01$)
Y5(4)	251	91	$p = 0.0000$ ** ($p < .01$)
Y5(5)	206	86	$p = 0.0000$ ** ($p < .01$)
Y5(6)	164	71	$p = 0.0000$ ** ($p < .01$)

The quantitative results of the elementary school English discourse from our small-scaled corpus showed that the number of giving information turns significantly outnumbered the number of requesting information turns for both instructors and pupils. It could be argued that both the instructors and the pupils committed themselves more to giving information turns than to requesting information. Moreover, it is reasonable to assume that instructors focused on “giving information” to pupils in elementary school English classes because the pupils are still in the primary stages of learning L2 (English) and need extensive exposure to the target language.

Table 5: Statistical Test Results of the Number of Pupil Information Gap Turns

Class ID	Giving Information	Requesting Information	Chi-squared test results
Y5(1)	384	106	$p = 0.0000$ ** ($p < .01$)
Y5(2)	208	23	$p = 0.0000$ ** ($p < .01$)
Y5(3)	191	13	$p = 0.0000$ ** ($p < .01$)
Y5(4)	133	21	$p = 0.0000$ ** ($p < .01$)
Y5(5)	85	7	$p = 0.0000$ ** ($p < .01$)
Y5(6)	118	16	$p = 0.0000$ ** ($p < .01$)





Given that the pupils exhibited significantly more giving information turns, it can be assumed that pupils respond to instructors as well as to their peers in classroom discourse, i.e., the initiation-response-feedback (I-R-F) sequence (Sinclair & Coulthard, 1975). The next two sections discuss our examination of pupils' target language use in their information gap turns, focusing particularly on "giving information" and instructors' initiation turns in sequence.

Pupils' Target Language Use and Information Gap Features

This section describes pupils' target language use in the I-R-F sequence in line with information gap features. The pupils' communicative interactions may also be observed, especially in using the target language (L2 = English), in the "giving information" turns. Tables 6 and 7 show the results of statistical testing of the target language use (L1, L2, or Mix) in giving information either in predictable turns, which can be considered answers to display questions, or unpredictable turns, which can be assumed to be answers to referential questions. The pupils who gave predictable information in half of the classes [Classes Y5(2), Y5(4), and Y5(5)] used significantly more L2 turns in responding to display questions (Table 6).

Table 6: Statistical Test Results of the Pupils' Giving Information Predictable by Language Use

Class ID	Giving information predictable				Chi-squared test results
	L1	L2	Mix	Σ	
Y5(1)	113	65	0	178	$\chi^2(2) = 108.427, p < .01$
Y5(2)	43	69	4	116	$\chi^2(2) = 55.368, p < .01$
Y5(3)	42	63	0	105	$\chi^2(2) = 49.234, p < .01$ (L1 = L2, <i>ns</i> $p > .05$)
Y5(4)	15	81	1	97	$\chi^2(2) = 112.919, p < .01$
Y5(5)	17	40	0	57	$\chi^2(2) = 42.425, p < .01$
Y5(6)	16	16	0	32	$\chi^2(2) = 16.002, p < .01$ (L1 = L2, <i>ns</i> $p > .05$)

Note. L1 = Japanese. L2 = English. Mix = mixture of L1 and L2.

Meanwhile, the pupils showed significant differences in using L1, L2, or Mix in their "giving information unpredictable" turns (Table 7), indicating that they responded to genuine requests, i.e., referential questions in either language. However, in half of the classes, the pupils used L2 more often [Classes Y5(4) – Y5(6) in Table 7], suggesting that communicative interactions in L2 were taking place while in the other half of the classes [Classes Y5(1) – Y5(3) in Table 7] the pupils used L1 more often. This suggests that, in these classes, pupils did not use L1 for communicative interactions as frequently as in the former three classes.





Table 7: Statistical Test Results of the Pupils' Giving Information Unpredictable by Language Use

Class ID	Giving information Unpredictable turn count				Chi-squared test results
	L1	L2	Mix	Σ	
Y5(1)	178	19	9	206	$\chi^2(2) = 261.881, p < .01$ (L2 = MIX)
Y5(2)	53	35	4	92	$\chi^2(2) = 40.069, p < .01$ (L1 = L2)
Y5(3)	58	28	0	86	$\chi^2(2) = 58.704, p < .01$
Y5(4)	17	18	1	36	$\chi^2(2) = 17.545, p < .01$ (L1 = L2)
Y5(5)	9	19	0	28	$\chi^2(2) = 19.359, p < .01$ (L1 = L2)
Y5(6)	32	44	10	86	$\chi^2(2) = 20.746, p < .01$ (L1 = L2)

Note. Gray-shaded cells indicate that the number of turns in the use of one language outnumbers those in the use of the other language. L1 = Japanese. L2 = English. Mix = mixture of L1 and L2.

Sequential Analyses

This section discusses the results of the sequential analyses of the teacher-pupil discourse based on observations of the I-R-F structure filtered through the teacher-pupil coding patterns (Table 2).

Table 8 shows the frequencies of interactions related to information gaps between teachers and pupils, where the teachers initiated the discourses, and the pupils' responses depended on their respective language uses. The coding number range for the information gap I-R sequence was 98 (the maximum; 125, and the minimum; 27), suggesting the instructors exhibited different styles of interactions with the pupils. We initially expected that teacher initiations in L2 would surely extract pupil responses in L2 and that teacher initiations in L1 would be followed by pupil responses in L1. However, the reality did not necessarily reflect this expectation. In some cases, instructors' L2 initiations extracted L1 responses from pupils (coded "B" in Table 8), and in other cases, instructors' L1 initiations extracted L2 responses from pupils (coded "D" in Table 8).





Table 8: Language Use in Teacher-pupil Information Gap Interactions (raw count)

Initiation-Response sequence		Year 5 Class Id					
Coding	Language sequence (Teacher → Pupil)	1	2	3	4	5	6
A	L1 → L1	64	19	41	12	5	21
B	L2 → L1	42	22	2	4	4	4
C	L2 → L2	9	27	21	15	18	24
D	L1 → L2	10	4	7	2	0	5
	Σ	125	72	71	33	27	54

Note. L1 = Japanese. L2 = English.

Figure 4 shows the language use ratios in the teacher-pupil information gap I-R sequence in the observed elementary school English classes. The following phenomena in the instructor-pupil I-R sequences warrant mention:

- Pupils' L2 responses followed teachers' L2 initiations (Coding C: L2→L2). However, a small number of teachers' L1 initiations prompted L2 responses from pupils [all the classes except for Class Y5(5)].
- Classes with more teacher L2 initiations than L1 [Classes Y5(2), Y5(4), Y5(5), and Y5(6)] exhibited the most "L2→L2" sequences (coded "C") within Classes; however, we observed less than 30% of the "L2→L2" sequences in the classes in which we observed over 50% of the "L1→L1" sequences (coded "A").



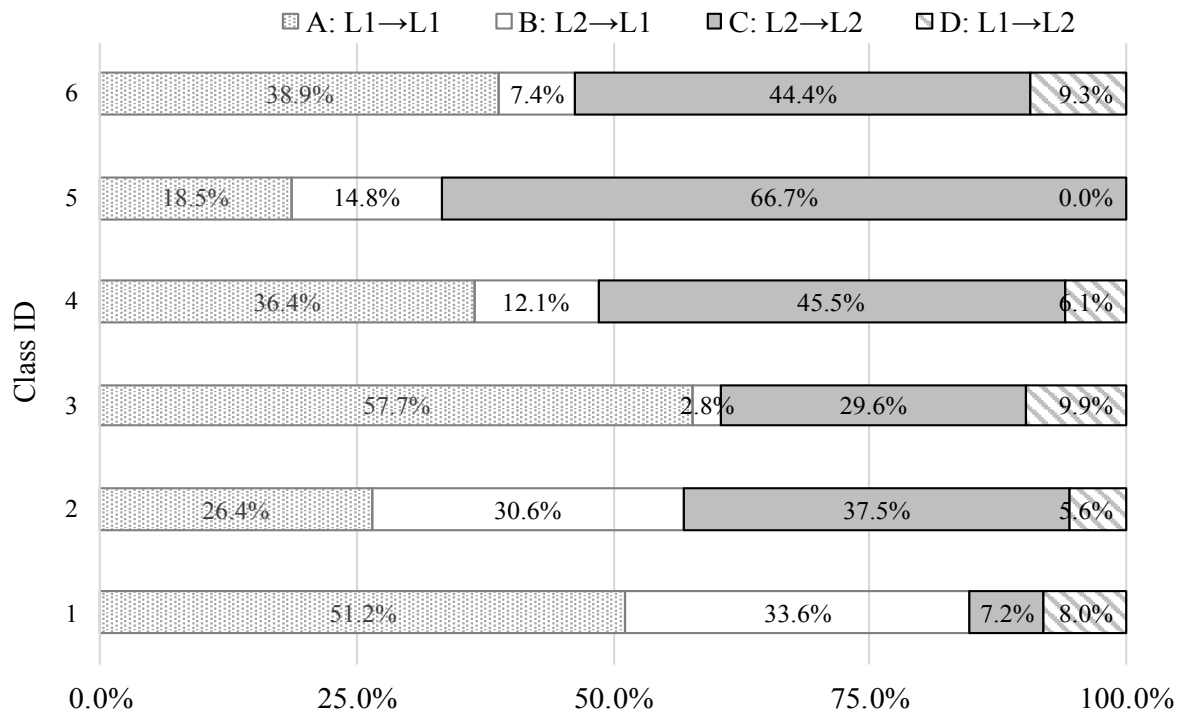


Figure 4: Language use ratios in the teacher-student information gap I-R sequence.

Table 9 summarizes the statistical test results of the coding counts for instructor turns preceding the pupils' L2 giving unpredictable information turns. The summary supports the results and the analyses from the table and the figure mentioned above (Table 8 and Figure 4).



Table 9: Statistical Test Results of Instructor Interactions before Pupils' L2 Giving Unpredictable Information Turns

Code	L1					L2					Chi-squared test results ^a	Mix					Σ
	10	11	12	13	14	20	21	22	23	24		30	31	32	33	34	
Class ID	GP	GU	RP	RG		GP	GU	RP	RG			GP	GU	RP	RG		
Y5(1)	2	2	3			1	2			4	$x^2(5) = 2.285, ns$						14
Y5(2)			4				15	12						2		1	34
Y5(3)	1	1	1	1			6		1	15	$x^2(6) = 45.602, p < .01$						26
Y5(4)		2					1	2	2	9	$x^2(4) = 13.375, p < .01$		1			1	18
Y5(5)			1				2	2	2	10	$x^2(4) = 16.235, p < .01$					1	18
Y5(6)		3	4	1		1	6	4	1	10	$x^2(7) = 18.000, p < .05$			1	1		32
Σ	3	8	13	2	0	2	32	20	6	48		0	1	3	1	3	142

Note. L1 = Japanese. L2 = English. Mix = mixture of L1 and L2. GP = Giving Info Predictable. GU = Giving Info Unpredictable. RP = Requesting Info Pseudo Request. RG = Requesting Info Genuine Request. ^aChi-squared tests compared coding counts of L1 and L2 but excluded the Mix count.

Classes Y5(3)–Y5(6) exhibited significantly more instructor L2 genuine requests from instructors (referential questions). Thus, it can be assumed that when instructors ask referential questions in L2, pupils are more likely to respond with unpredictable information in L2, which can be considered communicative. Figure 5 illustrates one such sequence.

C: L2→L2		
69	ALT:	And how old are you?
70	ST3:	<pause/>
71	ST3:	Eleven.
72	ALT:	Eleven years old? Wow.
73	ALT:	When is your birthday?
74	ST3:	October twenty-nine.
75	ALT:	October twenty-nine! Mm.

Figure 5: Sample of an instructor L2 genuine request that extracted unpredictable responses from a pupil in Class Y5(5).

The following three figures (Figures 6–8) respectively show sample sequences of instructor-pupil turn-taking depending on their language use coded A through D (Tables 2 and 9).

Figure 6 displays an excerpt from an L1→L1 sequence from Class Y5(1). The homeroom teacher asked questions in L1 (Japanese) after the ALT's L2 discussion of elementary schools in New





Zealand; hence, the pupils responded in L1, yielding no L2 responses from pupils. Only after the sequence was over (turn 647) did the ALT resume her talk in L2 (turn 648), which was more likely to provoke L2 responses from pupils.

A: L1→L1	
617	HRT: ニュージーランドでは、算数は勉強するの？ [Do they learn math in elementary school pupils in New Zealand?]
618	STs: する。[Yes.]
619	HRT: 理科は？[How about science?]
620	STs: する。[Yes.]
621	ST4: しない。[No.]
622	HRT: 社会は？[How about social studies?]
623	STs: する。[Yes.]
624	ST4: しない。[No.]
625	HRT: 音楽は？[How about music?]
626	STs: する。[Yes.]
.	
641	HRT: ということは、聞きますが、みなさんが今学習している内容とニュージーランドの小学生が学習している内容って似てる、似てない？ [Let me ask you then, is what you learn in Japan now similar to what they learn in New Zealand elementary school? Or not?]
642	STs: 似てる。[Yes, they are.]
643	ST5: 普通。[No big difference.]
644	ST6: 似てない。[They are not.]
645	ST7: 普通。[No great difference.]
646	ST8: 普通。[Nothing unusual.]
647	HRT: はいじゃあ次お願いします、はい。[(Talking to the ALT,) OK, then. Please go on.]
648	ALT: Okay, so, we also do...
.	

Figure 6. A: L1→L1 sequence sample from Class Y5(1).

Figure 7 shows an excerpt from Class Y5(3). It contains “L2→ L2,” and ”L2→ L1” sequences. In the first sequence, the ALT asked one pupil about his hobby (turn 74) in L2. The other pupils involuntarily translated what the ALT said to the pupil (turns 75 to 77) in L1. The pupil responded in L2 that his hobby was (reading) books (turn 78). The other pupils again involuntarily clarified his response, saying “reading, reading” in L2 (turn 80). In this way, turns





74 (the ALT initiation) and 78 (the pupil response) constitute an “L2→ L2” sequence. In the second sequence immediately following the first one, the ALT expanded her discussion with a follow-up (F) turn by asking an additional question in L2 (turn 81), which ended up extracting the pupil’s L1 response (turn 82).

C: L2→L2		
74	ALT:	Yes. What is your hobby?
75	ST1:	趣味。[Hobby.]
76	ST2:	趣味はなに? [What is your hobby?]
77	STs:	趣味? [Hobby?]
78	ST1:	Book.
79	STs:	あー。[Ah.]
80	ST2:	Reading, reading.
B: L2→L1		
81	ALT:	Books. What kind of books do you like to read?
82	ST1:	わかんない。[I don't understand the question.]

Figure 7: Sample sequences, C: L2→ L2, and B: L2→ L1 from Class Y5(3).

Figure 8 shows sample “L1→L2” sequences from Class Y5(4). The first sequence (turns 508–513) exemplifies a case in which the HRT initiated a turn with an L1 prompt using the directive form so that ST9 would ask ST10 what “she” (ST11 in turn 515) wanted to be in the future (turn 509). The HRT then prompted ST10 in L1 to answer (turn 510) by saying, “she....” (turn 511). However, though ST10 responded, “she wants to be, ...” after a silence in L2, he ended up saying in L1 that he did not know the answer (turn 512). In the subsequent sequence (turns 514–520), the HRT turned to ST11 and told her to answer L1 (turn 514), and ST11 responded in L2 that she wanted to be a beautician (turn 515). Eventually, ST10 was able to respond in L2 (turn 520), and the sequence ended. These two samples may constitute an example of an HRT scaffolding pupil responses to facilitate their communication in L2.





D: L1→L2	
508	HRT: じゃ、XXXくん、質問して。はい。[OK, then, Mr. XXX, ask her a question. Go.]
509	ST9: え、[Well,] What does she want to be?
510	HRT: はい、答えて。[Well, then, please answer the question.]
511	HRT: She...
	ST10: <silence/>
512	ST10: She wants to be... 知らない。[I do not know.]
513	HRT: 知らない? [Do you not know?]
D: L1→L2	
514	HRT: 知らないって。[He said he does not know.] 言って。[Say it.]
515	ST11: I want to be a beautician.
516	HRT: Ah, OK.
517	HRT: Beautician. はい、じゃ、もう一回。[OK, then, say it once more.]
518	ST11: Beautician.
519	HRT: Mm.
520	ST10: She wants to be a beautician.

Figure 8: D: L1→L2 sequence samples from Y5(4).

CONCLUSION

This study sought answers to the two research questions (RQs) from a small-scaled corpus that included six elementary school fifth-grader English classes from two types of elementary schools in Japan. This section concludes the study by discussing the answers to the RQs, their pedagogical implications, and the limitations of this study, and by making suggestions for further research.

Answers to the Research Questions

The first research question asked how communicative elementary school pupils' L2 (English) utterances were. Our analysis showed a statistically significant number of pupils' L2 responses containing predictable information in half of the classes in the corpus (Table 6). However, no statistical significance existed in their L2 unpredictable information responses (Table 7). Thus, we argue that the corpus evidence did not show significant communicative L2 interactions in Japanese elementary schools.

The second research question examined what instructor utterances triggered pupils' communicative L2 utterances. The evidence from the corpus showed that the fifth graders gave more L2 responses; these responses were unpredictable based on the instructors' genuine requests in L2 (referential questions), and thus, in this sense, communicative (Table 9 and Figure 5). Note,





however, that the teachers' L2 requests sometimes extracted pupils' L1 (Japanese) responses (the second sequence in Figure 7) instead of L2 responses, and some L1 teacher initiations triggered L2 pupil responses as well (Figure 8).

Pedagogical Implications

In this study, we observed that L2 I-R sequences existed in which instructors genuine requests (referential questions) in L2 led elementary school pupils to produce unpredictable responses in L2. The information gap in the sequences containing such turns implies the existence of teacher-pupil communicative interactions in fifth grade English classes in Japanese elementary schools. However, all L2 I-R sequences did not account for significantly more frequent occurrences. Thus, one of the pedagogical implications of this study's findings is that elementary school English instructors (JTs who are HRTs teachers in most cases and ALTs who co-teach with the HRTs) should deploy more L2 initiations in classroom discourse to increase the likelihood that their pupils will respond in L2. Such an approach will enhance communicative L2 interactions with pupils.

Another implication of our findings is that elementary school English instructors need to remain aware of the use of L1 initiation information gap sequences. While we found that teachers' L1 initiations extracted responses in both L1 and L2 from pupils (Table 8 and Figure 4), they naturally tended to extract L1 responses from pupils (Figure 6). When the instructors meant the L1 initiations to be imperative to demand the pupils' L2 production, they either scaffolded the pupil-pupil L2 interactions, or demanded the pupil L2 utterances (Figure 8). Instructors need to ensure the use of their L1 initiation turns.

Limitations and Suggestions for Further Research

This study had at least two notable limitations. The first one is the size of our elementary school corpus. If the sixth-grader segment of the corpus had also been added to the fifth-grader portion, the data would have been even more reliable. The second limitation is that we did not control for school types. Since the corpus data included classes from a public elementary school [Classes Y5(1) and Y5(2)] and from a university-affiliated elementary school [Classes Y5(3) – Y5(6)], institutional differences as well as whether the English classes only involved English activities or approached English as a school subject like math, science, and social studies may have accounted for the variations in the results (Table 9).

To overcome these limitations, researchers conducting studies in this area should consider the following. Our research vision should be expanded to all grades, i.e., from the third grades to the sixth grades, that teach English. Researchers need to observe elementary school English classes throughout these four grades in sequence. Future studies should also enlarge the size of the





elementary school spoken English corpus by expanding data collection. Moreover, researchers should try to collect English class data from different types of institutions—for example, public, private, and university-affiliated elementary schools. Such research findings will enable HRTs, as well as researchers and teacher trainers, more knowledgeable about elementary school L2 to enhance L2 communicative interactions.

NOTES

1. We used definitions of “requesting pseudo requests” and “genuine requests” interchangeably with “asking display questions” and “referential questions,” respectively, depending on the context throughout the paper.
2. We used the definitions of “giving predictable information” and “giving unpredictable information” interchangeable with “oral responses to display questions” and “responses to referential questions,” respectively, depending on the context throughout the paper.

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REFERENCES

- Ikegami, M. (2018). Practical report on a unit learning to enhance pupils' motivation: Using the method of joint storytelling. *JES Journal*, 18, 4-17.
- Japan Exchange and Teaching Programme. (2019). *History of the JET programme*. Japan Exchange and Teaching Programme. Retrieved from <http://jetprogramme.org/en/history/>
- Kano, A., & Ozeki, H. (2018). Insights from elementary school ALTs in Japan. *JES Journal*, 18, 116-131.
- Katagiri, N., & Kawai, G. (2015). Tabulating Transcripts and Coding on COLT Part B Scheme to Quantify Classroom Interaction Analysis Categories. *HELES Journal*, 14, 23-41. doi: https://doi.org/10.24675/helesje.14.0_23
- Katagiri, N., & Ohashi, Y. (2017). Developing Spoken Corpora of Non-Native English Teachers to Assist in English Classroom Interactions. *Official Conference Proceedings of the IAFOR International Conference on Language Learning, 2017*, 45-62.
- Katagiri, N., & Ohashi, Y. (2018). Instructor Lexical Analyses of English Activities and English Language as a Subject in Japanese Elementary Schools. *ARELE*, 29, 65-80. doi: https://doi.org/10.20581/arele.29.0_65
- Machida, T., Takahashi, N., & Kurokawa, M. (2017). Toward improving a classroom teacher's basic English skills through team-teaching. *JES Journal*, 17, 102-117.





- Ministry of Education, Culture, Sports, Science & Technology, Japan. (2008). "Chapter 4 Foreign Language Activities." *2008 Elementary School Course of Study*. Ministry of Education, Culture, Sports, Science & Technology, Japan. Retrieved from http://www.mext.go.jp/component/a_menu/education/micro_detail/_icsFiles/afieldfile/2010/10/20/1261037_12.pdf
- Ministry of Education, Culture, Sports, Science & Technology, Japan. (2010). "Chapter 4 Foreign Language Activities." *2008 Elementary School Course of Study*. [Translation by MEXT, 2010]. Ministry of Education, Culture, Sports, Science & Technology, Japan. Retrieved from http://www.mext.go.jp/component/a_menu/education/micro_detail/_icsFiles/afieldfile/2010/10/20/1261037_12.pdf
- Ministry of Education, Culture, Sports, Science & Technology, Japan. (2017). *Shogakko gakushū shidō yōryō (Heisei 29 Nenn Kokuji)* [Elementary school Course of Study (Government notification in Heisei Era 29)]. Ministry of Education, Culture, Sports, Science & Technology, Japan. Retrieved from http://www.mext.go.jp/component/a_menu/education/micro_detail/_icsFiles/afieldfile/2018/09/05/1384661_4_3_2.pdf
- National Institute for Educational Policy Research. (2018). *The results of the assessment (National Assessments of Academic Ability) FY2018*. Ministry of Education, Culture, Sports, Science & Technology, Japan. Retrieved from <https://www.nier.go.jp/18chousakekkahoukoku/index.html>
- Ohashi, Y., & Katagiri, N. (2017). The Effects of Explicit Instructions Observed in Teacher Transcripts and Student Impression Remarks in Elementary School. *HELES JOURNAL*, 16, 3-18. doi: https://doi.org/10.24675/helesje.16.0_3
- Sinclair, J. McH., & Coulthard, M. (1975). *Towards an analysis of discourse: The English used by teachers and students*. Oxford: Oxford University Press.
- Spada, N., & Fröhlich, M. (1995). *COLT communicative orientation of language teaching observation scheme, coding conventions, and applications*. Sydney: Macquarie University

