

学術英語技能統合型タスクにおける足場がけの提案

—学習者習熟度の観点から—

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近年、コミュニケーション能力の育成を目指して四技能を総合的に学ぶことの重要性が日本の英語教育において指摘されている。大学における言語テストや授業実践でも技能統合型タスクの実施が進む一方、タスクの高度な要求に学習者が対応できるよう習熟度に応じた足場がけを検討することが急務となっている。そこで、日本人大学生を対象に講義視聴と筆記要約からなる技能統合型タスクを実施し、事前タスクとして三種類の異なる足場がけを学習者に提供した上で、文法能力に基づき習熟度別に教育効果を比較した。その結果、講義の「構成」に関する足場がけは習熟度にかかわらず適切な要約作成を促すものの、「重要語彙」や「低頻度語彙」を用いた足場がけの働きは習熟度によって異なることが示された。本稿では学習者の要約例を議論した上で、低習熟度の学習者にはトップ・ダウン型、高習熟度の学習者にはボトム・アップ型の足場がけを活用することを提案する。

キーワード: 技能統合型タスク、足場がけ、学術目的の英語、習熟度、要約

1. Introduction

Recently, English education in Japan has recognized the importance of teaching the four skills synthetically to develop students who can command English for genuine communication (MEXT, 2014). In line with this trend, the new standardized university entrance exam, which is currently planned to start from 2020, will include sections that assess all of the listening, reading, speaking, and writing skills (MEXT, 2016). We observe that English education at the university level also seeks for the four-skill enhancement as well. As Flowerdew and Peacock (2001) stated, English for academic purposes, abbreviated as EAP below, requires students to command English for listening to a lecture, reading a textbook, writing an essay, and conducting an oral presentation in their second language, abbreviated as L2 below. One important point here is that each of the four skills described in the above sentence would not be utilized independently in an authentic academic situation; rather, students would need to orchestrate the four skills in combination to achieve their academic goals. For example, students' understanding of a lecture tends to be assessed through a written essay submitted at the end of the course, and the final essay commonly requires some further reading to make its arguments clear.

Skill-integrated tasks have been widely used in language classrooms as well as standardized language tests worldwide, such as the TOEFL iBT[®], to develop university students' integrative English skills (Plakans & Gebril, 2013). During skill-integrated tasks, receptive skills (i.e., listening and/or reading) generally proceed productive skills (i.e., speaking and/or writing) (Mochizuki, 2015). As an example, an integrated writing task, also known as a summarization task, consists of listening to a lecture and writing a summary in the students' L2. Oxford (2001) proposed that these integrated-skill instructions allow students to demonstrate their L2 skills in a quasi-academic situation.

However, in Japan where students learn English as a foreign language, they do not have many instances to use English outside the classroom. Those with limited English proficiencies seem to have difficulty to perform well in such high-demanding tasks because the skill-integrated tasks expect students not only to decode an input but also to express their understanding as appropriate output (Hosogoshi & Takahashi, 2015).

We still maintain that skill-integrated tasks should be implemented in EAP courses in Japan since they can provide students with opportunities to digest learned knowledge into applicable repertoire for language use

through “externalization of cognitive process” (Mizokami, 2014). In his concept of active learning, Mizokami explains that “externalization of cognitive process” involving output based on input facilitates skill acquisition ready for genuine daily practice. Active learning has been emphasized in recent Japanese education policy to develop autonomous learners (MEXT, 2008). Moreover, skill-integrated tasks seem to accord with one of the essential principles of language education worldwide: to help students learn *how to use* language, not learn *about* language (Murray & Christison, 2011).

Therefore, we attempt to explore how we can implement skill-integrated tasks at a university level in Japan by providing scaffolding. In the present study, we set a pre-task to scaffold students before the main task. By doing so, we aim to compare the effects of three different types of pre-task scaffolding on the performance of an integrated writing task: lecture organization, keywords, and difficult words. For the study, 66 Japanese first-year university students were divided into three groups according to scaffolding pre-tasks and assigned to listen to a lecture on global issues and to write its summary. The completed summaries were analyzed for length, as well as the degree of replication of the original lecture material. Each group was then further divided into two proficiency levels for discussion. In this paper, we discuss the results of the integrated writing task regarding two perspectives: the scaffolding types and the students’ proficiency levels. Consequently, we propose two implications of devising scaffoldings for students at different proficiency levels to enhance optimal learning.

2. Literature review

2.1. Skill-integrated tasks

Skill-integrated tasks are tasks that require more than one of the four skills to complete. Various kinds of skill-integrated tasks have been introduced to language classrooms. For example, a story-retelling task consists of reading a story and speaking about it, and an interview task requires students to ask the interlocutor some questions, listen to his/her response, and write down the gathered information (Fukazawa, 2015).

Among others, an integrated writing task, also called a summarization task or source-based writing, is often conducted in classroom practice and language assessment.

Knoch and Sitajalabhorn (2013) argue that the task requires the following:

- (1) mining the source texts for ideas, (2) selecting ideas, (3) synthesising ideas from one or more source texts, (4) transforming the language used in the input, (5) organizing ideas, and (6) using stylistic conventions such as connecting ideas and acknowledging sources (p. 306).

In an integrated writing task, the input can be listening or reading, or both. Students are required to summarize the source text or express their opinion on the text in a written form as the final output. Students’ performance during the task is commonly evaluated by assessing the final writing product (Mochizuki, 2015). As Cumming (2013) claims, while reflecting authentic EAP needs, the integrated writing task is sometimes overwhelming for students, because they “have to interpret the full significance of that source material to write about it” (p. 5).

2.2. Scaffolding: Advance organizers

For the above concern, not much research has investigated possible scaffolding to assist students’ performance during the skill-integrated tasks. Considering Cumming’s (2013) claim, we assumed that the primary concern was to assist the students’ understanding of the input that could be a bottleneck of the achievement in the whole task. Namely, we hypothesized that presenting advance organizers before listening might scaffold the integrated writing task.

The concept of advance organizers was first introduced by David Ausubel who was an educational psychologist in the 1960s. He proposed that “appropriate and relevant subsuming concepts (organizers) are deliberately introduced before the learning of unfamiliar academic material, to ascertain whether learning and retention are enhanced” (Ausubel, 1960, p. 267). Ever since, the scaffolding effects have been investigated in various disciplines such as mathematics, physics, biology, and social sciences (for review, see Luiten, Ames, & Ackerson, 1980).

In the context of L2 learning, various studies have been conducted regarding the use of advance organizers as a pre-task for listening to lectures. Jafari and Hashim (2012) reported that pre-learning of an organizational flow and keywords of the lecture were both helpful for successful comprehension. Contrarily, Sarandi (2010) reported that instruction of the organization of the lecture before listening was effective for the understanding of the

gist but not the details. Regarding vocabulary pre-learning, Mehrpour and Rahimi (2010) reported that learning content-specific, difficult words resulted in better listening comprehension, yet its effect size was smaller than on reading comprehension. Chang and Read (2006) compared four types of advance organizers: test question, input repetition, background knowledge, and vocabulary. As a result, topic preparation with background knowledge was the most helpful, followed by source repetition, question preview, and content-related vocabulary learning.

Despite agreeing with the usefulness of advance organizers, the previous literature has not yet reached a consensus on the scaffolding types that are suitable for L2 learning. While background information for top-down processing is proposed by Chang and Read (2006), Sarandi (2010) disagrees its efficacy for elaborated comprehension. Approaching vocabulary for bottom-up processing is offered by other scholars (Chang & Read, 2006; Mehrpour & Rahimi, 2010), but we shall need to explore further the quality of the presented vocabulary. Also, most of these studies examined the effect of advance organizers using multiple-choice tests on listening comprehension. However, further research is anticipated to explore the possibility of advance organizers for skill-integrated tasks.

Therefore, the present study aims to investigate the following research question: Is the students' performance in an integrated writing task affected by different pre-task scaffoldings and/or proficiency levels? If so, how?

3. Methods

3.1. Participants

A total of 66 Japanese undergraduate EFL students participated in the present study. They were first-year university students from the Faculties of Agriculture, Science, and Integrated Human Studies who attended academic English classes taught by the same teacher. Their average TOEFL iBT® score was estimated as 71 (out of 120), based on the results of a placement test conducted for the present study. Their English proficiency can be described as CEFR B1 level (Educational Testing Service, 2014).

3.2. Materials and instruments

(1) Placement test

The participants were assigned to take a grammar section of TOEFL® Practice Tests (Educational Testing

Service, 1997) and divided into six experimental groups. The test format exactly followed that of actual TOEFL PBT® tests; it consisted of 40 questions and took approximately 25 minutes to complete. Participants were asked to choose the best answer for each question to complete a grammatically correct sentence. Table 1 shows the results of the placement test by the six groups.

Table 1 Placement test score

Group	Organization -high (OH)	Keywords -high (KH)	Dif. words -high (DH)
<i>n</i>	11	11	11
<i>M</i>	30.18	30.55	31.00
<i>SD</i>	2.09	2.51	2.72
Group	Organization -low (OL)	Keywords -low (KL)	Dif. words -low (DL)
<i>n</i>	12	11	10
<i>M</i>	25.00	24.27	25.10
<i>SD</i>	2.37	2.20	3.28

Note. The full score of the placement test was 40.

A two-way ANOVA found a significant main effect of proficiency level: $F(1, 60) = 85.27, p < .001$, but no significant main effect of pre-task condition: $F(2, 60) = 0.36, p = .70$. It suggests that the three high-proficiency groups had better grammatical knowledge than the three low-proficiency groups, but within the same proficiency groups, grammatical knowledge of the students was standardized.

(2) Lecture video

A one-and-a-half-minute long excerpt from a lecture video (Lomborg, 2005) was chosen for the present study. The lecture was about global issues, and the lecturer proposed that people should start by prioritizing solutions of the problems to deal with such worldwide issues. We chose the excerpt as a suitable passage for university-level students because it satisfies the following criteria: its logic flowed from the introduction, the body, and the conclusion; it presented one or more main ideas with supporting details and/or examples; the content was not too professional but appropriate for the general academic level.

(3) Pre-task information

For the purpose of the present study, three kinds of information for pre-task scaffolding (i.e., organization, keywords, and difficult words) were developed.

First, five sentences were created as the pre-task information of the organization (O1 to O5, hereafter). Written in Japanese which was the participants' first language (L1, hereafter), these sentences explained the logical flow of the lecture. Specifically, they presented the topics argued in the lecture and sequenced them as they appeared, but excluded the comments that the lecturer made on each topic. For example, O1 wrote "The speaker proposes the theme of the lecture (global issues), comparing the ideal and the real." From this sentence, listeners can understand the lecture theme and how the speaker elaborates the idea by comparing the ideal and the real; however, the actual statement of how the speaker evaluates the ideal or real state is not included in the O1. Pre-task on organization is meant to help students grasp the overall gist of the lecture and listen along with it.

As for keywords, previous studies have utilized several ways to select keywords from a given text, such as the frequency of words, the uniqueness of words, an automated text mining approach, or an experts' evaluation. In the present study, an experts' selection was adopted to choose keywords because an automated text mining approach was not appropriate for the text used in the present study, which had less than a thousand words in length. First, four English language teachers were asked to read the lecture script individually and choose words they considered to be significant or essential for understanding the idea of the lecture. Next, from the candidate words by the four teachers, ten words chosen by two or more teachers were utilized as keywords (e.g., *challenge*, *prioritize*, and *solution*) for the present study. These keywords were presented to the students alphabetically with their meaning explained in L1.

Finally, difficult words were decided at a 3,000 frequency level or more. According to Zeeland and Schmitt (2013), listeners need to know 95 percent of the words in the source text for sufficient comprehension, and 2,000 to 3,000 word families are required to cover 95 percent of general listening text. Consequently, we tried to enhance the students' lexical coverage of the text by pre-teaching the meaning of difficult words that had a 3,000 frequency level or more, using *Web Vocabprofile* (Cobb, 2008). As a result, ten words were determined to be difficult words (e.g., *corruption*, *encompass*, *malnutrition*, and *subsidy*). Like the keywords, these difficult words were presented alphabetically, and their meaning explained in L1.

3.3. Procedure

The present study was conducted in three academic English classes taught by the same teacher with the same syllabus. In a CALL classroom, the participants enrolled in the study using same-spec computers with 20 inch-wide screens and headphones. Before the main study, they took the placement test to be assigned into one of the three types of pre-task scaffolding as previously shown in Table 1.

For the main body of the study, the participants were asked to complete an integrated writing task, which consisted of listening to a lecture on global issues and writing its summary. Before completing the task, students were provided with the assigned type of pre-task information: lecture organization, keywords, or difficult words. The pre-task information was displayed on the screen in front of the classroom for five minutes. The participants were instructed to anticipate the content of the lecture using the provided pre-task information. Then participants viewed the lecture video shown on each computer for 10 minutes. They were allowed to pause or rewind the video if necessary and encouraged to take notes about the lecture. Dictionary use was prohibited. After watching the video, the participants were asked to write a summary of the lecture on their computer for another 20 minutes. Dictionary use was not allowed during this process either. Finished summaries were electronically collected using CALL system. Throughout the task, participants were instructed to work individually, each using their own computer.

3.4. Data analyses

Participants' summaries were analyzed to identify and compare the effects of the three pre-task scaffoldings on the completed integrated writing task at two different proficiency levels. First, we divided the original lecture script into AS-units. An AS-unit is a representation of a set of information, commonly used for spoken passages (Foster, Tonkyn, & Wigglesworth, 2000). As a result, a total of 23 idea units were generated (IU1 to IU23, hereafter). Then the informational quality of each unit was carefully assessed to classify the units into three kinds of information: main ideas, supporting ideas, and additional ideas. Of 23 informational units, five main IUs, five supporting IUs, and 13 additional IUs were classified. Two raters then checked students' individual summaries to determine whether they included each of the 23 units of information or not. The

inter-correlation of the ratings by the two raters was $r = .82$ which indicated a satisfying inter-rater reliability. When the two raters' individual assessment did not match, a new assessment was confirmed after discussion. Raters also recorded misunderstandings of the original information when applicable.

After assessing individual summaries, the data from the six groups were analyzed by a two-way ANOVA test to determine if there was a significant difference among the six groups in the degree of the coverage of the original text. The Tukey-Kramer test was applied as a post-hoc analysis after the ANOVA test.

4. Results

4.1. Total length of summaries

Table 2 displays the descriptive statistics of the total length of summaries produced by the six groups completing the integrated writing task. Regardless of the proficiency levels, the organization group produced longer summaries that reached about 100 words. The two-way ANOVA test found significant main effects of pre-task condition: $F(2, 60) = 6.25, p < .01$, and also proficiency level: $F(1, 60) = 4.09, p < .05$. As shown in Table 2, the organization group produced significantly longer summaries than the keywords group among the three high proficiency groups. On the contrary, within the three low proficiency groups, it was the difficult words group that produced the shortest summaries.

Table 2 Total length of summaries

Group	<i>M</i>	<i>SD</i>	Post hoc
Organization-high (OH)	103.09	31.57	OH > *KH
Keywords-high (KH)	77.09	19.41	
Dif. words-high (DH)	87.91	25.72	
Organization-low (OL)	92.75	20.13	OL > *DL
Keywords-low (KL)	79.91	26.06	
Dif. words-low (DL)	58.90	21.61	

Note. ⁺ $p < .10$, * $p < .05$, ** $p < .01$

4.2. Coverage of IUs of the source

Tables 3 to 5 report the result of qualitative analysis of summaries regarding their coverage of IUs from the original lecture.

(1) Main ideas

The best coverage of the five main IUs in the summaries was 58.2 percent by the organization-high group, while the

worst was 20.0 percent by the difficult words-low group (Table 3). Significant main effect was found in pre-task condition: $F(2, 60) = 10.32, p < .001$, but not in proficiency level: $F(1, 60) = 0.47, p = .50$.

Table 3 Coverage of main IUs in summaries

Group	<i>M</i>	<i>SD</i>	Post hoc
Organization-high (OH)	0.582	0.189	OH > *DH
Keywords-high (KH)	0.382	0.189	OH > *KH
Dif. words-high (DH)	0.364	0.196	
Organization-low (OL)	0.550	0.271	OL > **DL
Keywords-low (KL)	0.473	0.224	KL > *DL
Dif. words-low (DL)	0.200	0.133	

Note. ⁺ $p < .10$, * $p < .05$, ** $p < .01$

According to a post hoc analysis, among the three high-level groups, the organization group replicated significantly more main ideas than the difficult words group. In the low-level groups, not only the organization group but also the keywords group significantly outperformed the difficult words group. Comparing proficiency levels, only for the difficult words did the higher students have some tendency ($p^+ < .10$) to include more important points than the lower students.

(2) Supporting ideas

Regarding the five supporting information, the organization groups could mention more than 70 percent of the detailed information, while the keywords and difficult words groups could catch about half of the source (Table 4). Statistical analyses indicated there was a significant difference between the organization group and the other two groups: $F(2, 60) = 20.34, p < .001$. The main effect of the proficiency level was insignificant: $F(1, 60) = 2.42, p = .12$, yet a post hoc analysis suggested a tendency of higher-level students' outperforming the lower ones in the difficult words condition.

Table 4 Coverage of supporting IUs in summaries

Group	<i>M</i>	<i>SD</i>	Post hoc
Organization-high (OH)	0.782	0.166	OH > **KH
Keywords-high (KH)	0.455	0.181	OH > **DH
Dif. words-high (DH)	0.564	0.175	
Organization-low (OL)	0.717	0.134	OL > **KL
Keywords-low (KL)	0.473	0.162	OL > **DL
Dif. words-low (DL)	0.420	0.175	

Note. ⁺ $p < .10$, * $p < .05$, ** $p < .01$

(3) Additional ideas

Compared to the main and supporting points, the 13 additional IUs were the least included information from the original lecture into summaries (Table 5).

Table 5 Coverage of additional IUs in summaries

Group	<i>M</i>	<i>SD</i>	Post hoc
Organization-high (OH)	0.217	0.032	<i>n.a</i>
Keywords-high (KH)	0.217	0.032	
Dif. words-high (DH)	0.196	0.032	
Organization-low (OL)	0.199	0.030	<i>n.a</i>
Keywords-low (KL)	0.147	0.032	
Dif. words-low (DL)	0.131	0.033	

Note. ⁺*p* < .10, **p* < .05, ***p* < .01

The two-way ANOVA test found no significant main effect of the pre-task condition: $F(2, 60) = 1.00, p = .38$ and proficiency level: $F(1, 60) = 3.88, p = .05$. The latter *F* value indicated a tendency of the higher-level students, who had included more additional points than the lower group did.

4.3. Other findings

Among various observations reported by the raters, the most notable was the comprehension of IU23, where the speaker concluded his argument by proposing his ultimate argument: “but the point is to prioritize solutions to problems” (Lomborg, 2005). IU23 are one of the five main IUs, and Table 6 indicates the percentage of students who have mentioned it in each group. While the majority of the participants in the organization and keyword groups could refer to the speaker’s conclusion, those in the difficult words group could not.

Table 6 Percentage of inclusion of IU23

Group	Yes	No	Percentage
Organization-high (OH)	8	3	72.73
Keywords-high (KH)	8	3	72.73
Dif. words-high (DH)	6	5	54.55
Organization-low (OL)	10	2	83.33
Keywords-low (KL)	8	3	72.73
Dif. words-low (DL)	2	8	20.00

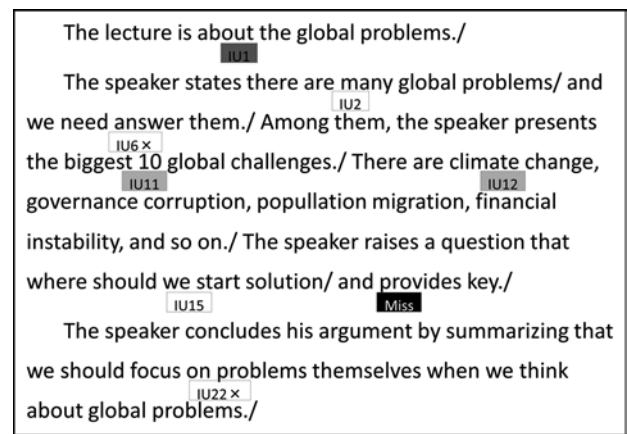


Figure 1 Example from the difficult words-low group

Figure 1 is a case of low-level students who studied with difficult words. Hereafter, IUs in the figures are marked with different colors: dark gray for main IUs, light gray for supporting IUs, and white for additional IUs. The sign *X* after a number of IU indicates that the segment has been judged as partial understanding of the original lecture. The black-colored sign *Miss* indicates the segment has been evaluated as misunderstanding which is irrelevant to the lecture.

In Figure 1, this student not only failed to catch IU23 but also disregarded IU22 as the conclusion. The speaker of the lecture mentioned “So the point is not to prioritize problems” in IU22, which should be treated as an additional IU to lead IU23. Other students from the difficult words-low group who exclude IU23 did not even mention IU22. These results might be due to the lack of information related to *priority* in the difficult words list. On the contrary, the keywords group who had *priority* in their keywords list could successfully summarize the conclusion (i.e., IU23).

The organization group adequately referred to the conclusion even though their pre-task scaffolding did not have any information regarding *priority*. A summary from the organization-high group replicated IU23 in combination with IU22 (Figure 2).

Seemingly, O5, “The professor concludes his lecture, suggesting ‘it is not A, but B’ that is a key to consider the proposition” signaled the students to anticipate some “not A but B” phrase at the end of the lecture.

The speaker introduces his speech mentioning the world problems as the main argument point./ He says that in the real world, we can solve not all problems in the world/ contrary to the ideal world./

Next, the speaker gives a question/ which asks which problem we should solve first in the real world./ He supposes that we have 50 billion dollars and 4 days to spend the money./ To think about this question, the speaker shows 10 examples, which are thought to be biggest problems in the world./ As the point we should pay attention when we think about this question, he warns that we should not focus on the problem itself too much./

The speaker concludes his speech by saying that what we have to focus on is not problems/ but solutions to the problems, when we cope with the question./

Figure 2 Example from the organization-high group

5. Discussion

5.1. Effects of the three types of scaffolding

From the results of the study, the following points are suggested for the use of the three types of scaffoldings in the integrated writing task.

First, pre-learning of the organization seems the most useful scaffolding regardless of the proficiency. The organization groups produced the longest summaries with sufficient main points and fewer misunderstandings. Notably, providing a frame of arguments alone could be useful to understand the gist. This finding contradicts Sarandi (2010), who argues the limitations of organizational cues for detailed comprehension. Supposing lower-level students performed well with this scaffolding type, they may benefit more from top-down assistance, such as setting the frame of the arguments.

Secondly, learning the meaning of difficult words beforehand would not necessarily lead to achievement in the integrated writing task. In the present study, the low-level students, especially, showed difficulty in understanding the most important points. It seems that some students concentrated on the difficult words to the point where they created some off-topic story, irrelevant to the main points of the lecture. Here is one example from the difficult words-low group:

“There is *barrier* and 15 *billion* people.”

In the above case, the difficult words, *barrier* and *billion*, were used in different segments of the lecture. We had hypothesized that pre-learning of low-frequency words would support students' bottom-up processing by expanding lexical coverage of the target text. However, this was not

the case, especially for low-proficiency students. Providing low-frequency words did not serve as appropriate building blocks for assembling an argument. A holistic frame or map for assembling would be more appropriate instead. The above finding supports Mehrpour and Rahimi (2010), namely, learning difficult words from the source may not greatly enhance listening comprehension.

Thirdly, keywords instruction would function as the medium of the organization and difficult words. To understand supporting details, it performed only as adequately as the difficult words. When it came to main ideas, learning keywords elicited better understanding than learning low-frequency words. Figure 3 is a student's writing from the keywords-low group. The summary accurately includes the introduction (IU1) and the conclusion (IU23) with several supporting details. One notable problem, however, is the frequent occurrence of imperfect understandings and misunderstandings. IU10 of the student's summary is an example of imperfect understandings. It excluded a set of conditions to think about the question (IU10: “If we had 50 billion dollars over the next four years”). The keywords scaffolding referred to *spend* and *world*, but not *billion* or *years*.

The lecture is about problems which are happening in the world./

The speaker presents some problems,/ for example, population increase, financial instability, commutable diseases, and climate change./ But speaker says we don't have technology to solve the problems,/ and don't know what biggest problem is/ and what we should spend to make good world./

So the speaker concludes his argument by summarizing that we should prioritize to have solutions to the problems./

Figure 3 Example from the keywords-low group

Also, the misunderstanding, indicated as *Miss* in Figure 3, consists of *biggest* and *problem*. These keywords were around the speaker's opinion, but he never explained as what the student summarized. Instead, the speaker said “Surely the biggest problem we have in the world is that we all die” in IU20. This part might have been challenging for the students as none of the pre-learned keywords related to *death*. From these observations, keywords would be a challenging version of organizational scaffolding since they will tell which information should be delivered without when.

5.2. Pedagogical implications

In this section, we propose two recommendations to utilize scaffoldings during an integrated writing task. As a principle, learning tasks should be sequenced from full-scaffolding, some-scaffolding, to non-scaffolding. Meanwhile, the organization condition might be too much supportive to reserve no adequate room for university students to engage in some active learning. We, therefore, propose to leave organizational pre-task as a last resort and to start with either keywords or difficult words instead.

Students with relatively low grammatical knowledge can start with keywords scaffolding that will assist them in focusing on a topic and developing an argument by confirming reasons and details. Then to elaborate concrete understanding, difficult words should be added in the second trial. If students still do not understand satisfactorily, the organization instruction comes as the third trial. The results of the present study indicate that listening after difficult words instruction may end up in serious misunderstandings. Students with limited grammatical knowledge would not be much good at decoding the listening input nor anticipating the upcoming segment by the lexical cue of the difficult vocabulary, so approaching from top-down processing should be useful for low-proficiency students.

On the other hand, students with sufficient grammatical knowledge can benefit from difficult word instruction from the first trial. They have enough ability to synthesize independent blocks of information to build a holistic understanding only if their lexical coverage is strengthened through pre-instruction of low-frequency words. For the second trial, keywords could be added to let students self-monitor whether their comprehension is adequate or not. When necessary, organizational scaffolding may be useful as the third trial to evaluate and confirm their interpretation of the source text. Overall, we suggest approaching from bottom-up processing is preferable for high proficiency students.

6. Conclusion

The present study has attempted to explore whether the students' performance in an integrated writing task is affected by different pre-task scaffoldings and/or proficiency levels. As a result, we found that while pre-learning of the organization of the lecture enhanced students' performance during the task, instructing difficult words was less promising especially for low-proficiency students. Therefore, pedagogical

implications from the study suggest employing top-down scaffolding for low-proficiency students, and bottom-up scaffolding for high-proficiency students. Supported by scaffoldings appropriate for each level, we believe that students can perform well in skill-integrated tasks and develop academic literacies in English as a prerequisite for EAP.

It would be useful to conduct future research that compares the orders of information within pre-task scaffolding. Our study presented keywords and difficult words in an alphabetical order during the pre-task. A comparison with the order of appearance would promote further discussion on the relationship between lexical learning and cognitive processing (i.e., top-down vs. bottom-up). Also, the present study succeeded in examining four of the six components of an integrated writing task by Knoch and Sitajalabhorn (2013). Therefore, the next research could broaden its focus onto the ways to scaffold the output side of skill-integrated tasks, namely, (4) transforming the language used in the input and (6) using stylistic conventions such as connecting ideas and acknowledging sources.

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Scaffolding Skill-Integrated Tasks for Academic English: With Special Reference to Students' Proficiency

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Aiming at fostering students' communicative skills in the target language, English education in Japan now emphasizes integrated teaching of the four skills. Skill-integrated tasks, which require students to utilize more than one of the four skills, have been implemented at a university level, in classroom tasks and standardized language tests. Students tend to struggle, however, with the high demands of such tasks, so further examinations of devising appropriate scaffoldings for the students' different proficiency levels would be anticipated. This paper focuses on one type of skill-integrated tasks: an integrated writing task that consists of listening to a lecture on global issues and writing its summary. The aim of the study is to explore whether or not the students' performance in the task is affected by different pre-task scaffoldings and/or by their proficiency levels. A total of 66 Japanese first-year students were assigned to the integrated writing task. Before completing the task, students were divided into three groups and provided with one of the following three types of pre-task scaffolding: lecture organization, keywords, or difficult words. Completed summaries were compared in terms of their length and the coverage of the content of the original lecture. Each group was also subdivided into two proficiency levels, depending on their grammatical knowledge, in order to achieve the aim of the study. The results thus indicated that providing lecture organization was most effective in enhancing the quality of the summary's content, regardless of the students' proficiency. The functions of keywords and difficult words scaffolding seemed to differ according to the students' proficiency levels. From the discussion using example summaries created by each group, we propose employing top-down scaffolding for low-proficiency students and bottom-up scaffolding for high-proficiency students.

Keywords: skill-integrated tasks, scaffolding, English for academic purposes, proficiency, summary