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The Effect of Languaging on the Grammatical Accuracy of Writing and Speaking English as a Foreign Language in Junior High School

Languaging が中学生の外国語としての英語ライティングと

スピーキングの文法的正確性に与える影響

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Abstract

The aim of this research is to determine (1) whether “languaging” is effective for Japanese junior high school students to improve their grammatical accuracy in writing and speaking English as a foreign language; and (2) which types of languaging are the most effective when acquiring an understanding of a grammatical feature, focusing on the third-person singular “-s” (hereafter, “third-person singular”).

This study consists of five chapters. The first chapter indicates the problems involved in learning grammar at Japanese junior high schools and states the purpose of this study. In the second chapter, the historical background that led to the emergence of languaging is described, previous studies are investigated, and the definition of languaging is explained. In addition, the methods of corrective feedback and data analysis used in empirical studies are reviewed. The third chapter examines the results of two pilot studies and provides reflections on their implications and shortcomings. In the fourth chapter, the research design of the main study and the results are presented. Finally, in the fifth chapter, the results of the main study are analyzed, along with their implications and limitations, with suggestions for further study.

Surveys conducted by the Benesse Educational Research and Development Center (2014, 2015) reveal that students find difficulty in English grammar and writing, despite the fact that teachers spend considerable time teaching grammar in classes. This

situation might be due to an overemphasis on direct grammar instruction without meaningful contexts and the lack of opportunities for students to write English compositions and receive feedback on their written product. Therefore, this study was administered with the aim of helping teachers to provide effective feedback by employing languaging, thereby improving students' grammatical accuracy in writing and speaking.

The participants in the main study included 53 public junior high school students, comprising two classes: 27 students in the languaging group and 26 students in the direct correction group. Before the pre-test, the students were given explicit instruction about the difference between first-person singular and third-person singular verb forms. After four months, the students were asked to write a composition on the theme "My Family." A speaking test on the same theme was also administered. The compositions written by the languaging group were returned with third-person singular errors underlined, whereas the other group received direct error corrections. The languaging group corrected their errors while discussing them in pairs and took notes, while the direct correction group checked the corrections individually without verbalization. Ten days later, a post-test was administered in writing and speaking on the same theme. Furthermore, third-person singular was extracted from the achievement tests which were administered one month and then eight months after the post-test, and analyzed

for accuracy.

To examine the accuracy of verb forms, obligatory occasion analysis was conducted for verb types and tokens. Furthermore, the languaging group was classified into six subgroups, according to the types of languaging they used: (1) the Spoken and Written Metalinguistic explanation (MSW) group that corrected errors using both spoken and written metalinguistic explanations; (2) the Spoken Metalinguistic (MS) group that corrected errors using only spoken metalinguistic explanations; (3) the Written Metalinguistic (MW) group that corrected errors using written metalinguistic explanations; (4) the Repetition and Writing (RW) group that could not correct errors by themselves but repeated their partners' utterances and took notes; (5) the Repetition only (R) group that only repeated their partners' metalinguistic explanations; and (6) the Zero participation (Z) group that remained silent.

Concerning the writing test, a Wilcoxon signed-rank test indicated a significant difference between the result of the pre-test and post-test in both the languaging group and the direct correction group, whereas a Mann-Whitney U test showed no significant differences between the two groups for either the pre-test or post-test. The data from the different subgroups reflected the MSW group's improved accuracy compared to the direct correction group. The RW group also improved accuracy, although the students could not correct their errors by themselves. On the other hand, even though the

students in the MS group took the initiative in discussions with their partners while correcting errors, their accuracy did not improve significantly after languaging.

As for the speaking test, the general findings were the same as the writing test. However, the MS group produced more accurate verb forms in the post-test in speaking while they did not show significant improvement in writing. This result might be due to the fact that students only used very familiar verbs in the speaking test, whose forms were remembered as formulae, implying that they may not have fully understood the grammatical concept of the third-person singular yet. In comparison, the extra monitor time available in writing might have resulted in hypercorrection, leading to the addition of an unnecessary be-verb. A closer analysis of the students' performance also indicated that their developmental stages of the third-person singular might be different in writing and speaking.

Overall, the results of the main study suggest that, first, languaging might have at least the same effect as teachers' direct corrections. Second, languaging might have a ripple effect, that is, even if a learner is unable to correct errors alone, they can subsequently improve their accuracy if their partner can help find solutions and offer explanations. Third, there is a possibility that languaging might deepen learners' understanding of the use of the third-person singular, and if learners become aware of the effectiveness of languaging, they may be encouraged to do it on their own, which

may contribute to more autonomous learning. Fourth, the results suggest the importance of teaching the distinction between verb types rather than focusing only on third-person singular. Moreover, the results of the students' writing and speaking tests indicated the developmental stages in the acquisition of the third-person singular. In future research, the most appropriate timing to adopt languaging as feedback based on the learners' developmental stage can be explored.

There were some methodological limitations in this research that make it difficult to generalize the findings. First, this study only examined the third-person singular, and a more comprehensive range of structures is required to examine the true effects of languaging. Second, to investigate the developmental stages of the third-person singular and the efficacy of languaging for each stage, a finer analysis of learner language should be conducted. Third, there was no control group that did not receive any feedback due to pedagogical considerations. Finally, there were limited data. These limitations should be taken into consideration in investigating the effects of languaging in future studies.

本研究は，Swain (2006) の主張する languaging が，日本語を母語とする中学生の英語ライティングとスピーキングにおける文法的正確性を向上させるのにどの程度有効であるか，また，どのような languaging の方法がより有効であるかを，三人称単数現在形の文法形態素-s（以下,「三単現」）に焦点を当てて，検証しようとしたものである。

論文は全 5 章から成る。第 1 章では, 日本の中学校の英語授業における課題と languaging を授業に取り入れることへの可能性を述べ, 第 2 章では, focus-on-forms から focus-on-form までの第二言語習得研究に基づく英語教育の変遷を振り返りながら，languaging を英語授業の中に取り入れることの意義，本研究における languaging の定義，先行研究における languaging の有効性，フィードバックや分析方法についての考察を述べている。続く第 3 章では, 2010 年と 2011 年に実施した予備研究の研究デザイン, 結果と考察, 第 4 章では, 2013 年に実施した本研究の研究デザイン，結果と考察を述べている。そして，第 5 章の結論部分では，本研究から得られた中学校の英語授業への示唆，研究デザイン上の問題，反省点，今後の課題を述べている。

ベネッセ教育総合研究所の中高生の英語学習，中高の英語指導に関する実態調査 (2014, 2015）によれば，授業の中で文法の説明や文法の練習問題がよく行われているにも関わらず，中学生の半数以上が「英語の文を書くのが難しい」「文法が難しい」と回答している。このようにつまずきを感じる生徒が多い要因として,「目的・場面・状況」を伴った文法指導が行われていなかったことや，英語の授業で，生徒が英文を書いたり，書いた英文に対して教員がフィードバックをしたりすることが質的･量的に十分に行われていなかったことが考えられる。

このことから，生徒に「英文が書けるようになった」という自信と達成感を与えるライティング活動のあり方と, ライティングを通して生徒が文法的正確性を高めるための教員のより適切な指導法やフィードバックのあり方を，第二言語習得理論研究の考えに基づき探ろうと考えた。具体的には,ライティング活動後のフィードバックの際に languaging を取り入れれば，生徒が自身の文法的間違いを振り返り，修正することができるのではないか，さらには，文法規則の理解を促進したり，正確性を保持したりすることができるのではないかと考え，研究計画を立て実施した。また，スピーキングにおける languaging の効果の違いについて検証を行うために，2 回目の予備研究と本研究では，スピーキングにおいても効果の検証を行うことにした。

本研究の参加者は，日本の公立中学校 1 年生 53 名で，定着に時間がかかるといわれている三単現を対象文法項目とした。

手順としては，まず，事前学習として，生徒が languaging の際にメタ言語的説明ができるよう一人称の文と三人称の文を示し，気付きを促した。事前テストは 4 カ月の期間をおいた後に行い，生徒に「私の家族」をテーマに英作文を書いてもらった。さらに，同テーマでスピーキングテストも行った。テスト後，グループを 2 つに分け，27 名の生徒（languaging group）の作文には，エラー箇所が分かるよう，三単現に関わる箇所に下線を引き，もう一方の 26 名の生徒（direct correction group）の作文には，教員による明示的な修正を行った。3 日後，それぞれのグループに作文を返却し，languaging group の生徒にはペアで対話をしたり, 気がついたことを書いたりしながらエラー箇所を修正するよう伝え，direct correction group の生徒には各自，黙って修正箇所を確認するよう伝えた。languaging group の対話は IC レコーダーに録音した。10 日後の事後テストは，事前テストと同じテーマ，同じ時間制限で作文を書き，スピーキングテストも行った。さらに，長期的な効果を検証するため，1 カ月後と 8 カ月後に行われた確認テストから三単現に関わる問題の解答のみを取り出し，分析データとした。英作文で得られたデータ，スピーキングテストで得られたデータは文字化し，事前・事後テストの正答数は obligatory occasion analysis によって，type count と token count で分析，平均値の差を比較した。

Wilcoxon signed-rank test による分析の結果，languaging group，direct correction group ともにライティングの正確性において事前テストと事後テストの間に有意差が見られた。また，Mann-Whitney の U 検定で両グループ間の検証をしたところ，有意差は見られなかった。

さらに，languaging の方法による効果の違いを検証するために，languaging group で使用された languaging のタイプを（1）スピーキングとライティングでメタ言語を使用した MSW グループ（2）スピーキングでのメタ言語を使用した MS グループ（3）ライティングでのメタ言語を使用した MW グループ（4）自力では修正ができず，ペアのメタ言語を繰り返し，メモをとった RW グループ（5）ペアのメタ言語を繰り返した R グループ（6）黙ってペアのメタ言語を聞いていた Z グループと 6 つのグループに分け，事前・事後テストの正答数における平均値の差を比較した。

分析の結果，MSW の正答率の変化が最も高く，direct correction group の正答率の変化

をはるかに上回った。次いで大きな変化が見られたのは RW で，R，MS に属する生徒は結果にばらつきが見られた。MS に属する生徒の多くは，languaging でのエラー修正率は 100%であったにも関わらず，ライティングでは，三単現が抜け落ちている，または事前テストでは正確に使用できていても, 事後テストでは正確に使用できていないという結果であった。

スピーキングテストは， languaging group 21 名，direct correction group 25 名のデータを分析した。データは, 英語話者によって文字化され，obligatory occasion analysis によって，type count と token count で分析し，事前テストと事後テストの正答数における平均値の差を検証した。

ライティングテストと同様，Wilcoxon signed-rank test では，languaging group，direct correction group ともにスピーキングの正確性において事前テストと事後テストの間に有意差が見られた。また，Mann-Whitney の U 検定では，両グループ間に有意差は見られなかった。

languaging group の使用した languaging におけるタイプ別分析で，ライティングテストの分析結果と異なったのは MS に属する生徒の結果であった。ライティングでは，事前・事後テストともに正答率が 0%であった生徒が, スピーキングでは, 全文ではないにしろ, 三単現を正確に使用できていた。その要因を探るために MS に属する生徒の発話内容を分析したところ，スピーキングでは，生徒が教科書で頻出の動詞を繰り返し使用していることが分かった。さらに，スピーキングでは三単現を使用できていた生徒がライティングでは be 動詞を過剰使用していることが分かった。このことから，三単現の概念理解が不十分である生徒にとっては，ライティングの振り返りの時間がむしろ弊害となり，考えすぎた結果，過剰使用してしまったのではないか，または，ライティングとスピーキングにおける三単現の習得の発達段階：(1)正確に使用できない段階,(2)動詞に-s はついているが be 動詞や助動詞と一緒に使用している段階, (3) スペリングミスや語尾の変化ミスが残っている段階, (4) 正確に使用できる段階, が異なっている可能性があることが見えてきた。

以上の検証結果から，以下の教育的示唆が見出された。(1) languaging は教員による明示的なエラー修正と匹敵する効果があると示されたことから, 教員中心の文法指導ではなく，学習者中心の文法学習の効果の可能性が示唆された。(2) languaging において，ペアの発話を聞くことによる波及効果があったことから，学習者の協働的な学びの有効性が

実証され，学習者の効果的なペアリングのあり方についても示唆が得られた。(3) 定着に時間がかかる文法項目の学習において, 学習者が languaging によるエラー修正の有効性を知れば，それを家庭学習でも生かすことができ，自律的学習者を支援することができる，(4)languaging のデータから，生徒が be 動詞と一般動詞の役割の違いについて理解することで，三単現の概念の理解が深まることが見えた。

しかし，本研究では対象文法項目が三単現に限られていたことから，今後，他の文法構造も調査する必要がある。また，生徒の三単現の使用状態についてさらに細かく質的分析をすることで，ライティングとスピーキングにおける三単現の発達の違いや，どの発達段階の生徒に対して languaging を行うことが有効であるかということも見えてくる可能性がある。教育的配慮から，完全統制群との比較ではなかったこと，languaging group がペアによるエラー修正であったのに対し，direct correction group は個人でエラー確認を行ったため,ペア対個人の比較であったこと,データのサンプル数が少なかったことも本研究の課題である。

今後の実証研究では, 以上の反省点を踏まえ, 分析方法を細分化し, さらなる質的分析, 否定文や他の文法構造での検証, 教員による明示的な修正を行わない完全統制群との比較, さらにタスク活動などの言語活動と合わせて languaging を行う中で，どの程度対象文法項目を正確に使用できるようになるかについての実証研究を行いたい。

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1. Introduction

1. 1 English language teaching in Japan: the gap between the government guidelines and the language classroom

The Japanese government-prescribed Courses of Study for lower secondary schools, enforced in 2008, emphasizes the importance of balance between four skills: listening, speaking, reading, and writing (MEXT 2008). However, according to the questionnaire survey conducted by the Benesse Educational Research and Development Center (hereafter, BERD) with 2,518 junior high school teachers, more than 75% of teachers practice “reading aloud” and “pronunciation” in their lessons frequently — 88.2% and 78.6%, respectively, but only 23.8% of them usually practice writing activities where students can express their ideas and feelings. This figure decreases to 11.6% in senior high schools (BERD 2015). Therefore, this result does not qualify as the well-balanced instruction that the Ministry of Education, Culture, Sports, Science and Technology (hereafter, MEXT) encourages in the Courses of Study. Consequently, students face difficulty in writing. Out of 6,294 sampled students, 65.7% of junior high school students and 77.5% of high school students answered writing as “difficult or fairly difficult” (BERD 2014). As Cameron (2001) shows, the language level at which students typically can write is slightly behind the level at which they can speak or listen. Given the complexity of writing, this result might be natural. Teachers in the BERD survey also noticed that writing was not only difficult for students, but 57.2 %

of them responded that writing caused them trouble and led them to lose motivation to study English. Moreover, in the same questionnaire, 53.0% of the junior high school teachers answered that they could not find an effective way to teach English, and 53.5% answered they wanted to learn to teach writing better. This result shows that the teachers have trouble both in setting up effective writing tasks and in giving feedback on their students' work. Lee (2004) claims that error correction in a written composition is the "most time-consuming and exhausting aspect of teachers' work" (2004: 289). Even if a teacher modified a student's composition, it is doubtful that the correction will be implemented successfully in the next writing task. In my experience as an English teacher, I have noticed that students tend to show interest in my comments about the content of their composition, but once they finish reading the feedback, they rarely look at the composition again. However, if teachers avoid giving writing exercises that enable students to express their ideas and feelings, and stop providing feedback, students will lose the opportunity to practice, and as a result, writing will remain difficult for them. This situation seems to be a vicious cycle, to which an urgent solution is needed.

To change this situation, it is necessary to identify which aspects of writing are the most difficult for students. Do they feel difficulty in gathering ideas, organizing ideas, or writing a text? In the questionnaire by BERD (2014), 68.5% of junior high school students and 79.2% of high school students answered "grammar" was difficult. They indicated that

they could not express what they wanted to say in the correct form, that is, they were unable to *use* grammar in a meaningful context. The national assessment of academic ability in English for students in the third year of lower secondary school, administered in 2019, also revealed the same problem. In the writing test, wherein students expressed their ideas and thoughts about a given theme, only 1.9% of the students were able to formulate correct answers and most of those who attempted the task lost points because of grammatical mistakes (MEXT 2019). However, the teachers' perceptions were different. In the BERD (2015) survey, 60.9 % of junior high school teachers reported that learning vocabulary was a cause of difficulty for their students, whereas only 40.9 % of the teachers reported that learning grammatical structures was a cause of the difficulty. In the same survey, 96.1% of the teachers said that they usually or often provide grammar explanations in class. In addition, 66.5% of the students spent time on drills as they reviewed English classes（BERD 2014). Therefore, the teachers might have believed that they taught grammar well, and thought that their students understood it well. However, all these efforts did not seem to help the students overcome their difficulties in applying their grammar knowledge to actual use. A major reason for this situation can be found in the aforementioned answer by teachers; they often focused on providing explicit "grammar explanations" instead of providing enough opportunities to students to apply the rules in context. Izumi (2018) points out that Japanese teachers who have been taught using the grammar-centered analytic method tend to worry

too much about making mistakes and are not willing to use English. Therefore, many teachers are most likely delivering grammar instructions in Japanese and solely focusing on explaining the rules. Such “one-way grammar explanations or drills” do not give students the opportunity to think and express their thoughts by practically using the grammatical rules in various meaningful contexts, which is essential for learning when and how the grammar can be utilized. This teaching style seems to be at the root of the problem.

To improve English education in Japan, English language teachers must acknowledge the developments in language teaching approaches witnessed during the last three decades. They must notice that grammar translation, which originated several centuries ago, is a method regarded as “theory-less” by Brown (2007), whereas the modern teaching approaches that appeared after the 1960s are all based on empirical data and are influenced by theoretical frameworks derived from second language acquisition research. Pedagogical paradigms have already shifted from “focus-on-forms” to “focus-on-meaning,” and further to “focus-on-form” in the last four or five decades. However, in practice, it seems that English teaching in Japan is still stuck in a rigid focus-on-forms approach. Teachers still provide models of target sentences, explain grammar rules, and have students practice them mechanically so that they can produce the forms correctly. Little emphasis is put on letting students use those forms to express their individual thoughts appropriately and fluently through communication.

The new Courses of Study for lower secondary schools, which were enforced in 2017, also emphasizes that English should be taught through language activities and that teachers should not focus on the target grammar before these activities. This emphasis means that it is necessary to reform the explicit grammar teaching method, which follows the present, practice, produce (PPP) pattern predominant in Japanese English classrooms, based on the traditional focus-on-forms approach. Shintani (2013: 3) states that "a key feature of PPP is that it seeks to elicit production of correct target forms right from the start as a means for learning them." Students who study grammar without considering context only learn the form and are not able to use the target structure fluently and appropriately in real-life situations. These observations touch on a core problem that foreign language classrooms in Japan have had for a long time. To overcome this situation, teachers need to make at least two changes in their pedagogy. First, to create more opportunities for students to express feelings, ideas, or thoughts in class and let them learn when and how to use target sentences before focusing on producing correct forms. The other is to provide students with opportunities to reflect on their utterances during communication activities, to draw their attention to form. This study focuses on grammar instruction, which is the foundation for both writing and speaking, and on feedback to learners regarding grammatical mistakes, through communication activities. In Japan, corrective feedback plays an important role in the study of English. Students expect to have their incorrect target language performances

corrected in English classes, as they know the purpose of this process is to improve their language ability (Zhang and Rahimi 2014). Therefore, this study focuses on incorporating "languaging," one of the ways of giving corrective feedback, as defined by Swain (2006).

1. 2 The potential of languaging

Languaging, as defined by Swain (2006: 98), is "the process of making meaning and shaping knowledge and experience through language." She insists that learners can deepen their linguistic knowledge through mediation. Lantolf (2000) explains "mediation" as either a physical or symbolic tool which enables people to establish or mediate their relationship with another world. In second language learning, such mediation involves (1) social interaction, (2) private speech, and (3) artifacts such as tasks and technology.

Swain believes that learners who deal with a task by thinking aloud understand the task more deeply and precisely than those who work on the task silently. Moreover, she argues that learners involved in languaging have better retention. This hypothesis is derived from the "mediated action model" of Vygotsky, who claims that learners need mediation by others through social interaction, mediation by themselves through private speech, or mediation by the authority through references such as a dictionary, to achieve a higher level of learning (Lantolf and Throne 2006). In this model, even if learners cannot solve a task (e.g., reading or understanding a text in the second language) by themselves, they are more

likely to complete it with others' assistance. If this holds true, languaging could be a promising addition to teaching grammar through writing activities alone. It involves students learning grammar through communicative interaction and provides them with opportunities to reflect on their utterances, to focus their attention on the form within meaningful contexts. Furthermore, I believe that languaging can help solve the problems of teachers who have trouble inculcating grammar and change the situation of one-way instructions by teachers. The purpose of this study, therefore, is to carry out languaging in the foreign language classroom in Japan and empirically verify its effects.

The participants in this study were public junior high school students, aged 12 to 13 years, who were taught by the present researcher. To examine whether languaging is actually effective in helping Japanese junior high school students improve their grammatical accuracy, two research questions were addressed in the first pilot study:

(1) To what extent is languaging effective in helping young learners[1] improve their accuracy in the use of a grammatical structure in writing?

(2) To what extent do different types of languaging have different effects in helping learners achieve accuracy in the use of grammatical features?

In the second pilot study and the main study, the effect of languaging on writing and speaking was examined. This included the following questions:

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[1] Young learners here denote the foreign language learners in junior high school.

(1) To what extent is languaging effective in helping young learners improve their accuracy in the use of the third-person singular "-s" in writing and speaking?

(2) To what extent do different types of languaging have different effects in helping learners achieve accuracy in the use of the third-person singular "-s"?

This study comprises five chapters. In the first chapter, that is, the introduction, some problems involved in English language teaching in Japanese junior high schools have been indicated and the purpose of this study has been established. The second chapter presents a literature review, starting with the historical background that led to the emergence of languaging, by presenting an overview of the change from focus-on-forms to focus-on-form. Then, the features of languaging are examined in the context of prior research, and languaging is defined more precisely. In addition, the methods of corrective feedback and data analysis used in empirical studies are examined. In the third chapter, the results of two pilot studies for the main study are investigated, and reflections on their implications and shortcomings are provided. The fourth chapter presents the research design of the main study and its results and analysis. In the fifth chapter, the research findings are discussed and analyzed in light of the educational implications for Japanese English classes, which need to become more well-balanced and learner-centered. Thereafter, limitations of the present study are taken up, with suggestions for future research.

2. Literature review

This chapter summarizes previous research findings relevant to this study, and consists of six sections. The first section, from 2.1 to 2.1.3, presents a description of the historical background that led to the emergence of languaging, by providing an overview of the change from focus-on-forms to focus-on-form in second language pedagogy. The second section consists of two subsections: the first subsection, from 2.2.1 to 2.2.7, introduces the original definition of languaging by Swain, and then discusses some features of languaging by reviewing prior research conducted under different conditions: (1) experimental settings (2) modes of languaging, and (3) types of teacher feedback. The second subsection, 2.2.8 and 2.2.9, focuses on the operational definition of languaging and the target structure in this study. The third section, from 2.3.1 to 2.3.3 discusses teachers' feedback to stimulate learners' languaging. The fourth section, 2.4, reviews the data analysis used in empirical studies and in the present study. The fifth section, 2.5, presents the differences between the present study and the study by Swain et al. (2009). The final section, 2.6, is the summary of this chapter.

2. 1 English language teaching from focus-on-forms to focus-on-form

Today, it is well recognized that English teaching approaches should have their theoretical foundations in second language acquisition research. These teaching approaches have undergone significant changes since the 1960s, from focus-on-forms to focus-on-

meaning, and then to focus-on-form. This section reviews the characteristics of each approach.

2. 1. 1 Focus-on-forms

Long and Robinson (1998) point out that the focus-on forms approach represents a "synthetic approach." As Wilkins (1976) explains, the language is taught piecemeal step by step, so that acquisition is a process of gradual accumulation of parts until the whole structure has been built up. "Grammar translation," the "audiolingual method," and "total physical response" exercises are examples of this approach. In English classes, linguistic items and forms are pre-specified by teachers or in the textbook and taught systematically, and learners practice target sentences, mainly drill-based, following the teachers' instruction.

The grammar-translation method has been employed since the 1840s and is still widely used today. Typically, in classrooms using this method, learners read sentences one by one and are asked to translate the target language into their mother tongue. Teachers draw the students' attention to specific forms in the texts and have them practice each form by filling in blanks with an appropriate expression, using discrete sentences which have no relationship between texts.

The audiolingual method arose as part of the grammar-translation method (Lightbown and Spada 2006). In this method, much emphasis is put on orally repeating the target

sentence patterns; learners are taught to read and write only after extensive oral practice. However, the learners are not allowed to speak spontaneously; instead, they repeat the teacher's model precisely. This practice is based on the belief that if learners make errors, those errors could become habitual and persistent. Therefore, errors are corrected immediately. Nevertheless, Ellis (2008) states that the audiolingual method is not an effective way to enable learners to incorporate what they had learned as new structures autonomously and spontaneously in real-life communication and that the target sentences would not be retained in the learners' long-term memory, because they are taught through decontextualized texts.

Total physical response (hereafter, TPR), which was developed by Asher (1972), also focuses on oral skills. Unlike the audiolingual method, which focuses on learning a target structure through decontextualized texts, in TPR, learners practice a target sentence by reacting non-verbally to the sentence spoken by the teacher, which aims at providing meaningful comprehensive input in context. In TPR, the teacher issues a command using a target structure, and the students act based on the teacher's command. The teacher then checks the students' comprehension by observing their actions. The students are initially not required to verbally respond to their teacher's commands, but Asher believes that physical action helps reinforce language learning (Horwitz 2020) and that learners can adapt what they have heard and understood to other language skills, like speaking, reading, and writing

(Asher 1972). All focus-on forms approaches are designed to direct learners' attention to a specific form through controlled exercises.

However, many researchers point out that if learners do not use the target structures in authentic communication exchanges to convey their ideas, feelings, or thoughts, the forms that they practice will not be retained (e.g., Doughty and Williams 1998, Ellis 1993, Lightbown and Spada 2006). Ellis (1993) indicated the problem of teaching grammar focusing on a particular form by noting that once students move on to the next item of the target language, they are no longer able to use the previous item. He insists that if students are forced to use a particular form when they work on a certain task, it no longer remains a natural production, only a grammar exercise. Such grammar exercises cannot be real tasks since they deprive students of thinking about the message to convey and from making decisions on how to express that message by themselves according to the context. By the 1980s, the importance of engaging learners in communicative activities gained attention, thereby giving them the opportunity to practically use English in meaningful contexts. As a result, a new teaching approach, focus-on-meaning, became popular, marking the rise of Communicative Language Teaching.

2. 1. 2 Focus-on-meaning

In response to the shortcomings in focus-on-forms instruction, some researchers insisted that learners acquire language incidentally and implicitly through exposure to input in the target language: focus-on-meaning. This belief has been exemplified in the "natural approach" and "immersion programs."

Krashen and Terrell (1998) defined the natural approach as the one where learners acquire language in communicative situations through meaningful inputs, without practicing specific grammatical structures (1998: 21). They believed that acquisition takes place when learners understand the messages in the target language and that the learners acquire grammar incidentally through actual communication. Teachers are expected to establish a good classroom atmosphere, to make students feel relaxed about modifying their utterances in communication to convey their meaning. The teachers are not expected to focus on grammar specifically or to correct the learners' errors explicitly, as these actions might reduce learners' motivation.

Immersion is another example of focus-on-meaning. One of the best-known examples of this program was developed in Canada in a program that involved the teaching of English through communication without direct grammar instructions. In this program, learners acquired the target language through actual communication that took place while they learned various school subjects in their second language.

The hypothesis underlying both the natural approach and immersion programs is Krashen's Input hypothesis, which claims that acquisition takes place when people are exposed to a large amount of language input that is comprehensible but is slightly beyond the current level of knowledge of the target language (1998). It was shown that extensive reading and listening activities, which were strongly endorsed by Krashen, were quite effective in developing the students' second language skills because such activities were ideal in providing rich comprehensible input in meaningful contexts.

Although some studies have shown focus-on-meaning as being more effective than focus-on-forms (e.g., Hammond 1988), many teachers had reservations about focusing only on meaning and not providing explicit grammatical instructions. This was because the immersion program, for example, resulted in learners who could comprehend and fluently speak the target language but could not produce grammatically accurate forms compared to their discourse and strategic competence.

Thornbury (2005) points out the importance of teaching correct forms. He believes that focusing on meaning at the beginning of language study is important but the input involving the frequent and repetitive occurrence of target sentences during classroom activities is not enough. He maintains that to develop proficiency in English, learners need opportunities to focus on form. He states that even if learners make a minor mistake, such as "I go" instead of "I am going," there is no problem in conveying the message, but if they

overlook this error, they will repeat the mistakes, such as “I no like” instead of “I don’t like,” or “I am student,” not “I am a student,” and their English proficiency level will not improve sufficiently. Furthermore, if the focus-on-meaning approach is used in an English-as-a-second-language (ESL) context, the learners have opportunities to notice the correct forms while communicating both inside and outside the classroom, as they have a considerable amount of natural input around them which is rich in context. However, in English-as-a-foreign-language (EFL) contexts, learners cannot expect such chances to implicitly learn grammar through abundant opportunities of language input, output, and interaction. Thus, the limitations of focusing only on meaning become all the more apparent in the EFL environment.

2. 1. 3 Focus-on-form

In the 1990s, in reaction to the drawbacks of the focus-on-meaning approach, an approach called focus-on-form became prevalent. Long (1991) defined focus-on-form as an approach where learners’ attention to form arises out of meaning-centered activities. Many researchers pointed out that exercises in the classroom should not only give learners the opportunity to use English in meaningful contexts but also the chance to revise their utterances and receive corrective feedback to facilitate language development (e.g., Long and Robinson 1998, Skehan 1998, Thornbury 2005, Ellis 2008).

Larsen-Freeman (2003) insists that understanding grammatical structure does not only mean using the forms accurately but also using them meaningfully and appropriately. Therefore, learners need to understand not only the forms of a language but also its semantic and pragmatic aspects. Larsen-Freeman states that any use of language involves three dimensions: form, meaning, and use. The first dimension, "form," consists of visible or audible units such as sounds, written symbols, inflectional morphemes, and syntactic structures. The second dimension, "meaning," consists of the semantic aspects of language; learners should know what the target form means. The third dimension, "use," consists of pragmatic aspects; learners notice when and why a target form is used in a particular context. Furthermore, Larsen-Freeman argues that it is important for learners to know the rules of the language along with the reasons for those rules.

Larsen-Freeman believes that knowing the reasons for the rules allows learners to understand that grammar is related to semantics and pragmatics, and that it helps learners to learn grammar in a way that is less rote and less mechanical. For example, if students know the "end-focus principle" in English grammar, that English speakers tend to put the most important or newest information at the end of a clause or sentence, they can understand that as a response to the question: "What did Meredith give Jack?" answering "Meredith gave him advice," would be more appropriate than "Meredith gave advice to him."

Knowing the reasons for the semantic and pragmatic differences between similar

structures enables learners to better understand the meaning and the use of the language. Moreover, if learners know the reasons for rules, they can adopt them on other occasions; in the case of the example above, students can adopt the idea when they take up passive sentences or cleft sentences. For example, when they write the sentence that follows "The anime I watched last night was exciting," they will notice that "It was directed by Hayao Miyazaki" is more appropriate than the sentence "Hayao Miyazaki directed it," since, in the latter sentence, the pronoun *it*, which refers to old information (anime), comes last, where the new information should be expressed ideally. The sentence in the active voice will, thus, sound unnatural to English speakers. Furthermore, if learners know the rule about the existential *there*, namely, that it is used to introduce new information into a discourse, they will notice that "There is an old house," is more appropriate than the sentence "There is the old house," because the determiner *the* is used for a noun which is not new information to the listeners. Larsen-Freeman believes that even for elementary-level learners, it is effective to explain the principles and reasons underlying various detailed rules.

Nation and Yamamoto (2012) claim that a well-balanced language course should consist of four equal strands: (1) meaning-focused input, (2) meaning-focused output, (3) language-focused learning, and (4) fluency development. "Meaning focused input" involves learning through listening and reading, with learners' attention focused on comprehension. "Meaning focused output" involves learning through speaking and writing, with learners'

attention focused on delivering the meaning. Both meaning-focused input and meaning-focused output facilitate incidental learning by emphasizing the meaning of language and do not necessarily draw the learners' attention to specific language forms. "Language-focused learning," in contrast, attends to formal features such as spelling, pronunciation, grammar, and discourse. Nation and Yamamoto also note that language-focused learning should not only focus on form but also on meaning and usage and that it should be initiated by learners, not by a teacher in one-way instruction. The fourth strand, "fluency development," aims to give learners opportunities to produce what they have learned with relative ease. Nation and Yamamoto state that fluency development is also a meaning-focused strand (2012: 168). At this stage, learners expect to express what they feel, think, or experience using new linguistic items as well as the ones they already know. Moreover, Nation and Yamamoto propose that an equal amount of time should be devoted to each of these strands in the course. In other words, they suggest that in focus-on-form, the time spent on activities focusing on form should be approximately one-third of the time spent on those focusing on meaning.

One type of the focus-on-form approach which consists of the four strands mentioned above is "task-based language teaching" (hereafter, TBLT). In TBLT, learners first work in pairs in problem-solving activities. In this process, understanding a target sentence structure accurately may not be necessary to complete the task. The learners use their schematic language knowledge to complete the task while reading or speaking the target structure

repeatedly to retrieve the meaning. Thus, the learners' consciousness is on the meaning of the task; therefore, problem-solving activities offer opportunities for (1) meaning-focused input and (2) meaning-focused output. While learners focus on understanding the target structures to complete the tasks, the teacher notices their common errors. The teacher then gives corrective feedback implicitly or explicitly, according to the learners' understanding, so as to draw their attention to the target form. However, unlike the explicit feedback given in focus-on-forms, the teacher does not correct all the errors which learners make, but instead focuses on specific errors, especially those that affect the meaning or those that learners constantly make; this is (3) language-focused learning. Then learners work on another similar task including the target form, with the expectation that the focused form would be used more accurately this time. With repeated practice of similar tasks, and focused corrective feedback, the learners' fluency and accuracy are enhanced; this is (4) fluency development. The fluency development stage should continue as long as it takes for learners to use the target items correctly and automatically.

The purpose of focus-on-form is that learners acquire the target language through meaningful communication and accuracy within context rather than through a focus on linguistic accuracy alone or just through meaning exchanges without paying enough attention to form. The problem with focus-on-forms and focus-on-meaning are that they are one-dimensional in their attention to only form or only meaning.

However, some researchers (e.g., Skehan 1998, Thornbury 2005) believe that it is very difficult for learners to pay attention to meaning and form at the same time. It is generally agreed that for proficient learners, it may be possible to focus on delivering meaning and being accurate at the same time, but this capability develops only after a certain level of accuracy and fluency are already acquired. Therefore, it would be reasonable for junior high school students to be given time either to focus on meaning or focus on form separately and enhance both abilities. Certainly, fostering the ability to convey meaning should be prioritized in junior high school English classes, but it is also essential for students to receive corrective feedback and have opportunities to pay attention to form. In Japan, people receive little exposure to spoken English in their daily life, and have few opportunities to receive feedback, especially outside school, thus students have little chance to notice their mistakes through everyday interaction. Therefore, it is important to give students opportunities in the language classroom to examine forms within a communicative context.

With focus-on forms, teacher-led direct feedback was predominant; however, after the 1990s, various types of indirect corrective feedback were studied, such as “clarification requests” where teachers say, “Pardon?” or “I don’t understand,” to extract correction from the learners. These messages connote that the utterance is ill-formed in some way and requires re-formulation. Teachers can also repeat the student’s utterance to highlight the error. Another technique is “metalinguistic clues,” in which teachers try to make students notice

ill-formed expressions by asking questions like, “Goed? What’s the past tense of go?” or “Do we say ‘goed’ in English?” “Elicitation,” in which teachers ask students direct questions, like, “How do you say that in English?,” or in which they allow students to complete their utterance by providing a pause, is another example of indirect corrective feedback (Lyster 2002: 381). Such feedbacks help students notice their errors and give them the chance to rectify them. However, when languaging is adopted in English classes, it enables students to examine form by themselves, and it has the potential to make language classrooms more learner-centered.

The next section defines languaging in detail as the definition seems to vary across different studies. After reviewing studies that examined the effects of languaging (e.g., Storch and Wigglesworth 2010; Ishikawa 2012; Suzuki 2012), a clear operational definition of languaging is specified for the purpose of this research in section 2.2.8.

2. 2 Definition of languaging

2. 2. 1 Original definition of languaging

Swain (1995) insists that producing language serves second language development in several ways, and proposed the Output Hypothesis. In contrast to the Input Hypothesis, which emphasizes the importance of input in language development, Swain states that “output” is related to improving accuracy in addition to fluency. She believes that there are

three main functions of output that draw learners' attention to accuracy. First, producing the target language makes learners notice the gap between what they want to say and what they can say, that is, they realize what their linguistic knowledge lacks. Second, it gives learners opportunities to try out expressions that they are not sure about, i.e., "hypothesis-testing." Finally, it provides learners with opportunities to become aware of linguistic forms and reflect and syntactically analyze them explicitly, i.e., "metalinguistic awareness." The concept of languaging is derived from the Output hypothesis, especially the function of metalinguistic awareness. However, according to Swain (2006), languaging is different from output or "verbalization." She states that output evokes an image of the user as just a conveyer of meaning, not as one employing language as a cognitive tool. She thus began to use the word verbalization in her research on "collaborative dialogue" (Swain 2000). She states that verbalization is a way of using language not only as a tool of communication but also as a means of building learners' linguistic knowledge. However, she had reservations about this terminology as well. She realized that verbalization may give people the impression that it refers only to "speaking acts." Therefore, she proposed the term languaging to indicate that producing language, either by speaking or by writing, can be a tool that facilitates learning.

Swain defines languaging as "the process of making meaning and shaping knowledge and experience through language" (2006: 98). She insists that learners will deepen their

linguistic knowledge through the mediation of "either speaking or writing acts" formed either in "dialogue with interlocutors or in private speech." She believes that languaging functions to deepen learners' awareness of the forms and rules of target sentences. She also argues that output itself is the means of enhancing second language acquisition. Giving learners opportunities to notice the gap between their utterances and what they wanted to say and to let them analyze their linguistic problems plays an important role in syntactic development. It allows them to seek out more accurate words or sentences. As a result, learners pay more attention to specific expressions when they receive "input," that is, they come to engage more actively in processing language input. Judging from Swain's claim, languaging seems to enhance metalinguistic awareness in the Output Hypothesis; it provides learners with opportunities to reflect on and analyze their problems explicitly. The employment of languaging in language focused learning proposed in the four equal strands, that Nation and Yamamoto (2012) suggest, could be effective, since languaging raises learners' attention to form and stimulates a more analytic approach to input.

Another researcher, Suzuki (2012), points out that languaging is compatible, although not identical, with the concept of "self-explanation" proposed by Chi et al. (1989). "Self-explaining refers to the knowledge-building activity that is generated by and directed to oneself" (2012: 1111), whereas languaging includes the form of dialogue. As we have seen, languaging occurs either in dialogue with interlocutors or in private speech. Thus, the

construct of languaging seems to be a broader concept. The next sections review previous studies that operationalize languaging differently, so as to formulate a clearer operational definition of languaging for the present study.

2. 2. 2 Early studies of languaging

Holunga (1994) undertook research that examined whether the verbalization of metacognitive strategies was effective in improving grammatical accuracy in speaking. The metalinguistic strategies in her study were predicting, planning, monitoring, and evaluating verb forms (Chalhoub-Deville et al. 2006: 107). The study divided the participants into three groups. Group 1 was taught metacognitive strategies and was instructed to use them while carrying out communicative tasks in pairs. Group 2 was also taught metacognitive strategies but was not instructed to use them when they worked on tasks. Group 3 was a control group, which was taught the same grammatical items without instructions on metacognitive strategies and was not required to use them as a means of problem solving. The participants received 15 hours of instruction, which included teacher-led lessons and communicative tasks, after which they took oral tests individually. The tests consisted of discrete-item questions and open-ended questions, which were designed to elicit the target grammar items concerning tense, aspect, conditions, and modals. The results showed that Group 1 improved in accuracy significantly, from pre-test to post-test, on both types of tests. Group 2 improved

only on the discrete-item questions, and Group 3 showed no improvement. Furthermore, the accuracy level of Groups 1 and 2 was maintained until the delayed post-test, which was administrated four weeks later. Swain (2006) analyzed these results as follows: "Verbalization helped the learners to notice the problems, hypothesize their linguistic needs, set goals for themselves, monitor their own language use, and evaluate their overall success" (2006: 108). Although the operationalization of the metalinguistic strategies employed in the study was not explained, whether the learners used their first or second language when verbalization was also not clearly mentioned, the research does imply that languaging can be effective in improving grammatical accuracy.

However, the participants in this research were adult second-language learners who had an advanced English proficiency level. It is generally agreed that metalinguistic knowledge is effective in solving problems for adult learners. Lightbown and Spada (2006) claim that "although young second language learners have begun to develop cognitive maturity or metalinguistic awareness, they still have far to go in these areas" (2006: 30). Therefore, it is necessary to examine whether metalinguistic verbalization is also effective for young learners whose cognitive maturity and English proficiency level are not that high.

Watanabe (2004) examined whether languaging was effective in improving grammatical accuracy in writing. In her research, two adult learners were asked to discuss orally the differences between their original writing and writing reformulated by a native

speaker of English. The language that the learners used in her research is not clearly mentioned. At first, one of the learners, Ken, rejected the corrections by the reformulator; however, later, through repeating the sentences and metalinguistic explanations, he noticed the problems in his writing and used the correct forms in the post-test. This result suggests that Ken solved his problems and created new knowledge of the language through languaging. Nonetheless, the post-test that Watanabe designed was a rewrite of the original story. Therefore, it is unclear whether Ken truly acquired the target language form or had simply memorized the correct forms and reproduced them.

2. 2. 3 Types of languaging used by learners under uncontrolled, implicit conditions

The types of languaging that learners use seem to be affected by the classroom setting before the experiment. Suzuki and Itagaki (2009) did not explain to the learners the benefits of using metalinguistic explanations in languaging and let them speak aloud freely, thus, this research adopted an uncontrolled, implicit setting to observe what kind of languaging the learners used, whereas Swain et al. (2009) explained the effects of metalinguistic explanations and encouraged the learners to use them; in other words, they gave specific instructions on languaging before the experiment, thus this research was conducted in a controlled, explicit setting. The rest of this section (2.2.3) and the next section (2.2.4) examine the previous research by Suzuki and Itagaki, and Swain et al., respectively, in which

different settings were adopted.

Suzuki and Itagaki (2009) undertook a study to examine the types of oral and written L1 languaging that Japanese EFL learners use, depending on the type of task and the level of the learners' proficiency. The participants in this study were 73 high school and 68 university students; they were judged to be low-intermediate and high-intermediate proficiency groups, respectively. Each group was divided into two subgroups and asked to work on decontextualized grammar exercises. Thirty-eight [sic] low-intermediate and 32 high-intermediate learners were asked to translate a given English sentence into Japanese, referred to as a "comprehension-oriented grammar exercise." Thirty-six [sic] low-intermediate and 36 high-intermediate participants were asked to translate a given Japanese sentence into English, referred to as a "production-oriented grammar exercise."

Here are the sentences they used:

> Comprehension-oriented grammar exercises:
> Target English sentence 1: "I don't know if it will rain tomorrow."
> Target English sentence 2: "I will stay at home if it rains tomorrow."
> Production-oriented grammar exercises:
> Target Japanese sentence 1: 「明日雨が降るかわからない」
> Target Japanese sentence 2: 「明日雨が降れば，家にいます」
> (2009: 220-221)

The participants were also asked to write their thoughts during the exercises, and how they arrived at the solution during the task. There was no time limit, but the participants finished the tasks within 20 minutes. Suzuki and Itagaki classified the participants' written reflections into the following three types of languaging: (1) "L1 lexis-oriented languaging,"

in which the participants wrote their reflections using Japanese words, phrases, clauses or sentences: e.g., *moshi~dattara*（if …）, (2) "L2 lexis-oriented languaging," in which the learners used English segments: e.g., *if*; and (3) "grammar-oriented languaging," in which learners used grammatical terms in their written reflections: e.g., *katei* (past hypothetical conditional), subject, tense, object (2009: 221). They counted the frequency of languaging that the learners produced and analyzed the means and standard deviations of the three types of languaging used for the two types of grammar exercises. The results showed no significant difference between the low-intermediate and high-intermediate proficiency groups in terms of the use of L1 lexis-oriented and L2 lexis-oriented languaging. However, both groups engaged in more grammar-oriented languaging when they were dealing with the comprehension-oriented exercise than the production-oriented exercise. The difference is indicated in the mean value of the grammar-oriented languaging for the high-intermediate group in the comprehension-oriented exercise, compared with the production-oriented exercise. Out of the total amount of languaging that the high-intermediate group produced in the comprehension exercise, 64.5% was grammar-oriented, whereas, in the production exercise, 52.1% was grammar-oriented. A series of Bonferroni *post hoc* tests showed significant differences between the comprehension- and production-oriented exercises in grammar-based languaging. They also showed that the high-intermediate proficiency learners produced more grammar-oriented languaging than the low-intermediate proficiency

learners, who produced 58.1% of grammar-oriented languaging in the comprehension exercise and 51.7% in the production exercise. At this point, Suzuki and Itagaki noticed that the type of languaging that the learners used depended on task type and task difficulty. In fact, only 20% of the low-intermediate participants got the correct answer in the production-oriented exercise. Suzuki and Itagaki concluded that it was too difficult for the low-intermediate group to focus on form. Therefore, the learners ended up examining only the semantic aspects of the sentence. Suzuki and Itagaki suggested that if teachers want lower-intermediate learners to focus on form and use grammar-oriented languaging, the teachers need to provide assistance to draw learners' attention to forms. Unfortunately, the study does not explicitly explain what the actual assistance should look like. In addition, this research had the following limitations: (1) the experiences that the learners had undergone and the treatment before the exam were not clearly accounted for, (2) the number of target sentences was limited, and (3) there was no pre- or post-test analysis to examine the effect of languaging. However, this research usefully shows the three types of languaging that learners tend to use in an uncontrolled setting, where learners are not explicitly instructed about what languaging is. The following section will present a review of some research that shows types of languaging in a controlled setting, where learners are explicitly instructed about languaging before the treatment.

2. 2. 4 Types of languaging used by learners under controlled, explicit conditions

Swain et al. (2009) undertook research to examine the effect of oral L1 languaging when learners deal with the grammatical concept of voice (active, passive, and middle) in French under the condition that learners are explicitly instructed how to talk about the target forms. The participants in the research were nine university students whose French proficiency level was intermediate. Out of nine students, six were born in Canada, and the others were born in Czechoslovakia, Pakistan, and Hong Kong. For the latter three students, English was not their L1, but they used English in their daily life. In this research, Swain, et al. investigated three points: whether languaging helped students gain a deeper understanding of the target structure; whether there was any difference in the effect depending on the types of languaging; and whether the amount of languaging was a determining factor. The types of languaging that the participants used are examined here. The mode of this research was oral; the researchers asked the participants to read a text and think aloud when they explained or defined the concept of voice in French.

The study was designed in two sessions; the first session consisted of six phases and the second session was a delayed post-test. The first session lasted 90 minutes, including a 10-minute break, and the second session, which was administered one week later, lasted approximately 20 minutes. The procedures were as follows: (1) In the warm-up stage, the researchers explained French determiners sentence by sentence on cards with a large

typeface, then the participants were given a short text with indefinite, definite, and partitive articles in boldface type and were asked to explain each item aloud. After the participants got familiar with the way to explain the target structure aloud, (2) a pre-test was administered to elicit their existing language knowledge. In the pre-test, the participants were asked to talk about the form and meaning of a text with thirteen verbs in boldface type. Then the researchers provided the participants with four key metalinguistic terms, active voice, passive voice, middle voice, and agent, and asked them to define the concept of voice. (3) In the languaging stage, the participants were provided with 36 explanatory cards, including two diagrams, which showed the concept of voice in French, sentence by sentence, or chunk by chunk, and were asked to examine each piece of information and explain it aloud. It took 50 to 75 minutes to move from the warm-up stage to the languaging stage. (4) After a 10-minute break, (5) the researchers designed an immediate post-test and (6) held interviews to determine the participants' learning background and their perceptions of the activities. In the immediate post-test, the same text as in the pre-test was provided, and the participants were asked to identify the voice of each sentence using metalinguistic terms. It took 15 to 30 minutes to complete the immediate post-test and the interviews. One week later, a delayed post-test was administrated. At this stage, a new text, which contained 11 blanks, was provided, and the participants were asked to fill in the blanks using the appropriate verb form. The researchers also engaged in a stimulated recall by asking the participants what they were

thinking while they were working on the task.

Swain et al. analyzed the data qualitatively and quantitatively. They transcribed the learners' languaging and categorized it into three types: "paraphrasing," "inferencing," and "analyzing." In paraphrasing, the participants repeat the explanatory texts in their own words. Inferencing was subdivided into three types: "Integration," in which the participants use the information in the texts; "Elaboration," in which the participants try to incorporate or compare the new information about the language with their previous knowledge; and "Hypothesis formation" in which the participants develop their own notions. Analyzing occurs when the participants apply the explanatory text to a specific sentence and parse it in terms of agent/patient/subject/object (2009: 11). Figure 1 is extracts of the examples that Swain et al. categorized. Paraphrasing, inferencing, and analyzing are called "concept-bound languaging," which refers to "cognitively complex talk directed at understanding conceptual units" (Knouzi 2010) that the researchers provide. The units consist of three key components: grammatical aspects, semantic aspects, and a mixture of the two. The other types of languaging, "self-assessment" and "rereading," were not categorized as "concept-bound but as methods which helped learners to understand the concept of voice." In self-assessment, participants voiced their thoughts about the task, such as by saying, "I don't understand this part" (2009: 11). In rereading, the participants just read a part of or all the explanatory text.

Types of languaging	Examples
Paraphrasing	*"So uh another way of phrasing the subject of the sentence is the agent or the doer of the action."*
Inferencing	Integration *"So you don't have to say by,* par le*, the members of the parliament."* Elaboration *"The patient doesn't change. Just the s- position of it changes, from object to subject."* Hypothesis formation *"So you might assume that the patient will take on the role of the direct object in the middle voice as well because that's similar to what the passive voice does?"*
Analyzing	*"Okay uh sa bicyclette is the object, but in this case it's the subject uh, a ˊ etˊe volˊee is the verb."*

(2009: 29)

Figure 1. Three types of concept-bound languaging

Swain et al. categorized the participants into "high languagers," "middle languagers," and "low languagers," according to the amount of verbalization, and compared the results. Two high languagers produced paraphrasing, inferencing, analyzing, and self-assessment scores that ranged between 19.2% and 24.7% and a rereading score of 8.4% (2009: 15). On the other hand, low languagers mainly used paraphrasing, inferencing, and analyzing, and rarely used self-assessment or rereading, with scores of only 0.1% and 3.1%, respectively. This result differed from the research by Suzuki and Itagaki (2009), which was designed in an uncontrolled environment since here all the participants used grammar-oriented

languaging. Swain et al. seemed to expect the participants to use metalinguistic terms from the beginning. They taught the participants how to explain the target structure explicitly in the warm-up stage. They then told the participants that for a deeper understanding of second language grammar, it is important for them to be able to explain grammatical concepts in the languaging stage. In addition, the explanatory texts and the prompt questions that the researchers provided to stimulate languaging were grammar-oriented, e.g., "Can you define the term agent/patient?" (2009: 8). Therefore, it is quite natural that the participants used more grammar-oriented languaging than in the study by Suzuki and Itagaki.

Furthermore, Swain et al. claim that the quality and quantity of languaging may affect the learners' degree of understanding. In the delayed post-test, the high languagers produced an average of 8.5 correct forms out of the 11 test items, whereas the middle and low languagers produced 8 and 5.5 correct forms, respectively. Swain et al. pointed out that the high languagers used a variety of languaging types, and that their analysis was more elaborate than that of the other participants. However, it is unclear whether languaging actually facilitated learning, since there was no control group. Although Swain et al. insist that "all students learned something about the concept of voice" (2009: 20), this result may not be regarded as evidence for the effect of languaging. As they point out, the participants had little or no knowledge about grammar at the beginning. They learned a grammatical concept through the explanatory texts. They may have improved their grammatical

knowledge because of the texts, not because of their verbalization. In addition, it is not clear which types of languaging helped learners understand cognitively complex ideas. According to the results, the frequency of self-assessments by the high languagers was approximately six times higher than that of the other two groups. However, it is doubtful that self-assessments such as “This is not clear,” or “I am not sure what this means,” or straightforward rereading helped learners to understand the grammatical concepts better, although they may have had an indirect effect. To examine this point, a control group that studied the target structures without languaging would have been necessary.

2. 2. 5 Effects of oral languaging

Knouzi et al. (2010) investigated the study by Swain et al. (2009) to determine why languaging was beneficial to some learners but not to others. They focused on two of the learners in the study and examined their verbalization in a micro-genetic design. One participant, Heidi, was classified as a high languaging learner, and the other one, Lisa, was classified as a low languaging learner. Knouzi et al. basically classified the languaging types in the same way as in the original study: paraphrasing, inferencing, analyzing, self-assessment, and rereading. They insisted that even if learners do not produce cognitively complex utterances, there is a possibility that rereading can help learners realize unclear points and aid them in their cognitive processes. The pre-test result in Swain et al. showed

that the two learners were not familiar with metalinguistic terms such as active, passive, middle voice, agent, and patient and that the level of their understanding seemed to be the same. However, in the languaging stage, Heidi produced 135 “languaging units,” whereas Lisa produced only 37, so they were classified as a high-languager and a low-languager, respectively. As the test stages went on, the high-languager consistently outperformed the low-languager. Knouzi et al. pointed out that the reason could be not only a difference in quantity but also in the quality of their languaging. Heidi used a variety of languaging methods, whereas Lisa used only paraphrasing and analyzing. The most significant difference was that Heidi tried to integrate her new grammatical knowledge into her prior knowledge and explain new information in her own words. Lisa, on the other hand, seemed to just focus on what she saw and did not try to closely investigate the structures involved. Knouzi et al. argued that “reading alone is often not enough” (2010: 35). They noticed this point by analyzing Heidi’s languaging processes. At first, it seemed that Heidi understood the meaning of an explanatory card which was used in a languaging stage in the research by Swain et al., but once she tried to explain it in her own words, she found that she did not fully understand it. Therefore, she focused on a specific part and muttered the sentence again and again while analyzing it in her own words. Knouzi et al. concluded this phase might have enhanced her understanding.

This research suggests some core elements of languaging. First, learners may need to

compare new information with other information, or with their previous knowledge of grammar, to analyze the characteristics of the form. Second, learners may need to explain new material in their own words to reorganize and integrate it into their declarative knowledge. Through such verbalization, learners may find out the point they should focus on and negotiate the form or meaning in relation to their previous knowledge. These processes seem to replicate those involved in classroom interaction with teachers; that is, languaging by oneself may be as effective as languaging with others, and that "comparison," "negotiation," and "self-explanation" may be keywords to help learners understand a target structure.

The following section presents a review of research into the effects of written languaging on learning grammar, in comparison with Swain et al. (2009) and Knouzi et al. (2010), which were studies that examined oral languaging.

2. 2. 6 Effects of written languaging

Ishikawa (2012) examined whether written L1 languaging can have a positive effect on L2 learning. The participants in this research were 14 college students divided into an experimental group and a control group. There were four sessions in this study: (1) After the teacher's instruction about the procedure, the participants practiced taking "metanotes": e.g., "I wrote *kinou dakara* (because it's yesterday) *went*?" (2012: 6). (2) One week later, a pre-

test was administered in which the participants were requested to judge whether some sentences were grammatically correct or not and to make corrections if necessary. They had no time limit, but all the participants finished the task in six minutes on average. (3) The following week, all the participants were asked to translate four Japanese sentences that contained the target structure, tense consistency, into English. At that time, the experimental group was asked to include written languaging, namely metanotes, while the control group simply translated Japanese into English. Eight minutes later, the participants in the experimental group were asked to compare their translations with a native speaker's model and make metanotes for three minutes, while the control group checked the model silently. (4) After that, an immediate post-test was administered. This test was the same as the pre-test but in a different order, and the participants were asked to recognize correct sentences. There were 15 questions on the test, of which 10 contained the target structure. There was no time limit, but the participants spent 7 to 11 minutes to finish. After a four-month interval, a delayed post-test was administered. Ishikawa classified the experimental groups' metanotes into three types: grammar-focused, lexical, and other. The grammar-focused notes were concerned with morphology or syntax: e.g., "Do I need to put an article before *smile*?" (2012: 7). The lexical notes were concerned with vocabulary: e.g., "What is the English word for *shunkan* (=moment)?" (2012: 8), and the other notes were concerned with neither grammar nor lexis but with matters such as punctuation or spelling: e.g., "Is a comma

necessary here?" (2012: 8). The results show that the participants took lexical notes the most, 82% of the time, while they were doing the recognition task, and 68% while they were comparing their metanotes with the native speaker's model, respectively. They took grammar-focused notes only 15% and 25% of the time, respectively, in the same stages. Unlike the results by Swain et al. (2009), this study showed fewer learners used grammar-focused languaging. On this point, Ishikawa (2012) posited that this result may have been due to task difficulty. The result was consistent with the research by Suzuki and Itagaki (2009), which suggested that when faced with translation tasks, lower proficiency learners cannot afford to pay attention to form, and the teacher's intervention is necessary to draw their attention to it. In Ishikawa's research, the participants' Test of English for International Communication (TOEIC) scores ranged from 255 to 440 (2012: 4), which indicates they were lower proficiency learners. Therefore, they mainly focused on looking for the words they needed to translate Japanese into English. In addition, there was no significant difference in the scores on the pre-test, immediate post-test, or delayed post-test between the experimental group and the control group. The average scores for the experimental group and the control group were 4.4 and 4.3 out of 10 on the pre-test, 5.3 and 5.4 on the immediate post-test, and 5.1 and 4.6 on the delayed post-test, respectively. As these results show, the scores of both the experimental group and the control group declined slightly on the delayed

post-test. In short, the study does not show any durable effect of languaging.[2] Although Ishikawa's research was valuable in terms of examining the effects of written languaging, which received little attention in past empirical studies, the results were unclear.

Suzuki (2012) also examined the effects of written languaging. His premise was that written L1 languaging can induce a deeper understanding of L2 linguistic knowledge than oral L1 languaging such as collaborative dialogue and private speech. He argued that in oral languaging, there is an interlocutor who can understand or predict what the speaker wants to say without detailed explanation, whereas written languaging necessitates a "more explicit and complete expression of ideas" (2012: 1113). Moreover, he insisted that written languaging allows learners "time for reflection and less demand on working memory" (2012: 1114). The participants in this research were 24 Japanese university students whose English proficiency level was judged to be intermediate. The study consisted of three stages: writing, receiving feedback, and languaging and revising. After receiving direct corrective feedback from a native English instructor, the participants were given 30 minutes to examine their mistakes in written languaging in Japanese. The results showed that they used languaging related to "grammar" (62%) more than to "lexis" (26%) or to "I don't know" (12%). After that, an immediate post-test was administered, in which they were asked to revise their first

[2] Swain (1998, 2000, and 2006) suggested that languaging (verbalization) may help learners retain knowledge longer.

writing on a new sheet of paper in 20 minutes. In this exercise, the learners significantly improved their grammatical accuracy; the average rate of error decreased from 23.30% to 2.65%. In addition, the uptake rate, which was measured by the successful incorporation of correct forms in the revised writing, consisted of 91% in grammar-oriented languaging: e.g., "I had to use the past hypothetical conditional here" (2012: 1120), 96% in lexis-oriented languaging: e.g., "*limited* sounds better than *small* when we say *sukunai* (=little in amount) in this context" (2012: 1120), and 73% when learners wrote, "I don't know the reason." Suzuki claims that if learners understand and explain the reasons for their errors, it is more effective than if they are not sure of the nature of the problem and just memorize the correct answer. This result seems to be compatible with the results of other research (e.g., Sachs and Polio 2007; Knouzi et al. 2010; Storch and Wigglesworth 2010) which showed that learners who used metalanguage and clearly articulated the reasons improved their accuracy in post-tests. This result is in contrast to the study by Ishikawa (2012), because more participants used grammar-oriented languaging in Suzuki's study than the participants in Ishikawa's study in the languaging stage. In Suzuki's study, out of the total languaging which the learners produced, 62% was grammar-oriented, compared to 25% in Ishikawa's study. On this point, Suzuki posited that learners who received implicit feedback, such as comparisons of reformulated texts by a native speaker of English, had to identify the changes first, and then find a solution to the change that they noticed. In such a case, learners tend to notice

lexical problems more easily than grammatical ones. In addition, Suzuki argued that lexical problems are easier to explain orally and that learners who received explicit feedback tended to produce more grammar-oriented languaging than learners who received implicit feedback. This finding suggests that when teachers want to draw the learners' attention to grammar, they should provide explicit feedback. Another significant aspect of Suzuki's research is that it involves a wide range of error correction. He explains that "the native English instructor provided direct correction on all linguistic errors that he noticed" (2012: 1118). This type of treatment will be helpful for some learners who expect teachers to correct all the errors they make in composition activities. Although empirical studies show that focused corrective feedback is more effective than unfocused corrective feedback (e.g., Sheen et al. 2009), the research by Zhang and Rahimi (2014) shows EFL students want their errors to be corrected immediately. If languaging has a positive effect on correcting a wide range of errors in a fell swoop, it will be helpful for such learners, and there is a possibility that it might work in the same way in the acquisition of a wide range of grammatical structures.

However, as Suzuki points out, there were some limitations in his study: (1) to verify whether the results were actually derived from the effects of languaging, another study with a control group would be needed; (2) to dispel the possibility that the participants used a memorization strategy, the topic of the writing should be changed in the post-test; and (3) it would also be necessary to examine the long-term effects of written languaging.

Ishikawa (2012) and Suzuki (2012) suggest that the way teachers give feedback might affect the languaging that learners use. The following section, thus, takes up different types of languaging in reaction to different forms of feedback.

2. 2. 7 Types of languaging in reaction to different forms of feedback

Storch and Wigglesworth (2010) investigated the effects of verbalization in reaction to different forms of corrective feedback. The participants were 48 ESL university students whose proficiency levels were advanced; their International English Language Testing System (IELTS) scores were 6.5 or higher. They worked in pairs and were asked to write a report on a graphic prompt showing the average rainfall in four cities. Five days later, half of the pairs got direct written feedback, which was reformulated by an experienced ESL teacher, and the other half received indirect editing, in which errors were identified in codes, underlining, inserted symbols, and brackets.

Here are examples of the feedback:

Types of feedback	Examples
Reformulations	Original: This chart illustrates an average rainfall in each season in the year 2000. Reformulation: This chart illustrates average rainfalls in each season in the year 2000.
Editing	The rainfall in Lagos city is 240 mm on average in summer, which the highest amongst the other season. ^ C F C: an error in word choice, F: an error in word form

(2010: 170)

Figure 2. Two forms of feedback provided in the study by Storch and Wigglesworth

Then both groups were asked to discuss the feedback orally using L2 for 15 minutes. After the researcher collected the feedback, all the pairs were given the original version of their writing and asked to rewrite their report in 30 minutes. All dialogues were tape-recorded. A delayed post-test was administered three weeks later, in which the participants were asked to write about the same graphic prompt individually. In this research, Storch and Wigglesworth classified three types of languaging, depending on the focus: form (e.g., verb tenses, articles, and sentence structures), lexis (e.g., word choices, including prepositions, and word meanings) and mechanics (e.g., spelling, punctuation errors) (2010: 172). The

qualitative results show the editing group produced more languaging related to the teacher's feedback than the reformulation group in the time allotted for processing and rewriting. Storch and Wigglesworth suggest that editing seems to make learners focus on the target items and engage in the activity to solve linguistic problems. The editing group produced 77 examples of "form-related languaging," 82 of "lexis-related languaging" and 29 of "mechanics-related languaging" during the allocated time, whereas the reformulation group produced 55 examples of form-related languaging, 68 of lexis-related languaging and four of mechanics-related languaging, respectively. Furthermore, the rate of "uptake" in the editing group (87.72%) was higher than that in the reformulation group (54.49%). This result indicates that some learners in the reformulation group rejected the teacher's feedback, as they could not understand the reason their writing was unacceptable. Swain and Lapkin (2002) also argue that learners reject a reformulation if it is not compatible with their previous knowledge, or if it changes their intended meaning. In the Storch and Wiggleston study, the editing group discussed matters deeply until they reached an agreement. However, this research has some puzzling results. The accuracy of the reformulation group lasted longer than that of the editing group. In this regard, Storch and Wigglesworth concluded that some learners in the reformulation group tried to memorize the reformulated text, with little analysis. They suggest that the amount of verbalization is not a significant factor in improving grammatical accuracy. Whether the learners accept and accommodate feedback

seems to be more important than the amount of verbalization. “Acceptance” and “accommodation” may be additional keywords that help learners acquire a target structure.

Sachs and Polio (2007) undertook a careful study on the effects of L2 verbalization. They investigated the extent to which different types of feedback affect writing accuracy. The participants were 54 English-as-a-second-language students with mixed English proficiency levels. They were divided into four groups and three types of feedback were compared: 12 learners were in a direct error correction group, 11 were in a reformulation group, 16 were in a reformulation involving thinking aloud group, and 15 were in a control group. This study was designed in a three-day sequence. First, the participants were asked to write a description of a picture in 30 minutes. Two days later, the participants received different feedback and were asked to examine it for 15 minutes, while the control group was asked to examine uncorrected writing for 15 minutes. After a weekend interval, the participants were asked to revise clean copies of their original writing. The results showed that direct error correction seemed to be the most effective: The learners in the direct error correction group improved their accuracy rates 87.6%, while those in the reformulation group, reformulation and think aloud group and control group scored 70.5%, 72.9% and 55.2%, respectively. However, in this research the learners in the think-aloud group had to explain their revisions in front of the teacher using L2. This requirement must have been a burden for them. Although the study design itself seemed to be faulty (e.g., in terms of the

time allotted for and the form of thinking aloud), the results offer some intriguing suggestions. Sachs and Polio point out that "providing a reason for a change or using metalanguage about it during the think-aloud [approach] was associated more with making a change in the revision than with not making one" (2007: 82). This result is a clear indication of the importance of "metalanguage" in the process of languaging.

In fact, substantial empirical research shows metalanguage may well be the most significant cognitive tool in solving linguistic problems (see Table 1). The participants used metalanguage to solve their linguistic problems in all ten studies. In addition, half of the studies show that using metalanguage works better than the other types of languaging, such as meaning-focused languaging or read-out-loud languaging (Holunga 1994, Swain and Lapkin 1998, 2002, Watanabe 2004, and Suzuki 2012). Suzuki and Itagaki (2009) show that higher-proficiency learners tend to use metalanguage more often than lower-proficiency learners. Furthermore, Swain et al. (2009) show that high-languagers who verbalize more often than other learners produce more correct sentences. This study was replicated and supported by Knouze et al. (2010). Only three studies do not show a positive effect of languaging (Sachs and Polio 2007, Storch and Wigglesworth 2010, and Ishikawa 2012).

Table 1

Types of languaging in empirical research *Boldface indicates metalinguistic languaging

Researcher(s)	Year	Mode (Written/Oral)	Types of languaging	Participants	Results
Holunga, S.	1994	Oral	**Metacognitive verbalization** Meaning-focused	Adult advanced learners	The metacognitive verbalization group showed more significant differences than the metacognitive without verbalization group and the comparison group.
Swain, M. and Lapkin, S.	1998	Oral	Lexis-based**, Form-based**	Two eighth grade French immersion Students	Two target learners build knowledge about the target sentence while solving linguistic problems collaboratively.
Swain, M. and Lapkin, S.	2002	Oral	Lexical, **Form**, Discourse	Two seventh grade French immersion Students	Two target learners' grammatical accuracy improved in the post-test.
Watanabe, Y.	2004	Oral	**Form-based**, Read out loud	Two Japanese adult learners	One learner who engaged in error correction using form-based languaging could use the target sentence correctly in the post-test, but the other learner, who just repeated partner's utterance or read the text aloud, did not make changes between pre- and post-tests.
Sachs, R. and Polio, C.	2007	Oral	**Metalanguage,** Lexis, Reason, Rereading, Self-assessment[3]	15 adult learners	The direct error correction group produced more accurate sentences than the think aloud (languaging) group.

[3] Sachs and Polio (2007) categorize eleven levels of learner awareness: (1) mentioned only or read again with special emphasis, (2) misspelling, (3) use of metalanguage without an explanatory reason, (4) oversight, (5) reason, (6) new lexical item, (7) old lexical item, (8) lack of reason, (9) rejection of change, (10) wrong reason, (11) reading the correction aloud; but in Table 1, these have been consolidated into five.

Researcher(s)	Year	Mode (Written/Oral)	Types of languaging	Participants	Results
Suzuki, W. and Itagaki, N.	2009	Written	**Grammar-oriented** L1- lexis, L2-lexis	141 Japanese university students	The high-intermediate proficiency learners tended to use more grammar-oriented languaging than the low-intermediate proficiency learners.
Swain, M. et al.	2009	Oral	**Concept-bound (Paraphrasing/Inferencing /Analyzing)**	Ten university students	The quality and quantity of languaging affected the results. High-languagers produced more correct sentences than low-languagers.
Knouzi, I. et al.	2010	Oral	Self-assessment, Rereading	Two university Students	
Storch, N. and Wigglesworth, G.	2010	Oral	**Form**, Lexis, Mechanics (spelling, punctuation)	48 university students	Both the direct and indirect feedback groups improved grammatical accuracy, but the direct feedback group retained accuracy longer than the indirect feedback group.
Ishikawa, M.	2012	Written	**Grammar,** Lexis, Other	18 Japanese college students	There was no significant difference between the experimental group and the control group.
Suzuki, W.	2012	Written	**Grammar based**, Lexis based, Other	24 Japanese university students	Learners improved their grammatical accuracy with the use of written languaging in response to direct correction by a native English instructor.

2. 2. 8 Definition of languaging in the study

So far, while investigating prior research conducted under different conditions: (1) experimental settings (2) modes of languaging and (3) types of teacher feedback, some key components of languaging have become clear: comparison, negotiation, self-explanation, acceptance, accommodation, and metalanguage. These might be important cognitive tools for learners in the process of refining their L2 knowledge. Although self-explanation, collaborative dialogue, and languaging all seem to be knowledge-building activities that allow learners to notice, examine and accommodate linguistic items into their declarative knowledge, these concepts are slightly different from one another, as previously noted on pages 22 and 23. The differences among them are summarized in Table 2.

Table 2
Features of "self-explanation," "collaborative dialogue," and "languaging"

	Form of verbalization	Mode of verbalization
Self-explanation	Private talk	Oral or written
Collaborative dialogue	Pair talk	Oral
Languaging	Private talk or pair talk	Oral or written

Although most empirical research on languaging focuses either on the forms of self-explanation or collaborative dialogue and on oral *or* written modes, taking notes during conversations seems to be a more natural form of communication, with a combination of

oral *and* written modes, in daily life. Nevertheless, little research has been conducted on investigating the effects when learners use both oral and written languaging at the same time. Therefore, the present research investigates the effects of languaging when learners use both modes, in addition to attempting to examine the effects of languaging that involve forms of collaborative dialogue.

To distinguish languaging which involves both oral and written modes at the same time from languaging which involves separate oral and written modes, the present study defines languaging as follows:

"Pair-explanation activities in which learners solve linguistic problems with the use of oral and/or written forms."

2. 2. 9 Target structure in the study

Many researchers have investigated the acquisition order of grammatical morphemes (e.g., Brown 1973, Kwon 2005, Luk and Shirai 2009). Their studies revealed that even for native speakers of English, the third-person singular "-s" is a morpheme that takes a long time to acquire, in other words, to use spontaneously or automatically, let alone for second language learners, for whom it takes even longer (Luk and Shirai 2009). Table 3 is an excerpt showing the L1 acquisition order of English morphemes in Brown's study.

Table 3
Order of acquisition of English morphemes in Brown's study

Rank	Morpheme
1	present progressive "-ing"
2 & 3	in, on
4	plural "-s"
5	past irregular
6	possessive ('s)
7	uncontractible copula (is, am, are)
8	articles (a, the)
9	past regular "-ed"
10	third person singular "-s"

(In Kwon 2005)

Luk and Shirai (2009) replicated the empirical studies that examined the acquisition order of morphemes of Japanese learners of English as a second language. They claim that despite the different contexts of learning and methods of data collection and analysis, most of the empirical studies show articles, past-tense, and third-person singular "-s" are acquired late by learners of English, including Japanese learners, whereas the progressive "-ing" form does not take long to acquire.

There are some reasons the third-person singular "-s" is more difficult for English learners to acquire than other morphemes (see, e.g., Goldshneider and DeKeyser 2001, Song et al. 2009, Slabakova 2016). First, it is a functional morpheme, which means that it cannot stand alone in a word or sentence and does not supply any message. Hence, communication rarely breaks down even if "-s" is omitted. Consequently, in everyday natural conversation,

few native speakers would consider the omission of the third-person singular "-s" as problematic in interaction. Second, it is a phonetically short element that might be difficult for learners to perceive. Third, it has a number of phonological alternations: [s, z, ez] according to the verb final phoneme, which can confuse learners, whereas "-ing" has only one phonological form [ɪŋ]. Fourth, it has a characteristic rule, namely that "-s (-es)" is only added to verbs when the subject is the third-person singular, not with other subjects or with the third-person plural. Therefore, both learners whose mother tongue has no changes in verb conjugations according to the subject, as well as those whose mother tongue has different conjugational verb forms for each grammatical person, such as German, French, and Spanish, have difficulty using this morpheme correctly. Its semantic complexity is also problematic for learners: the third-person singular "-s" expresses person, number, and present tense, which are grammatical meanings, whereas the plural "-s" expresses number, a semantic concept that is easier to understand.

Based on the aforementioned reasons, it is necessary to explicitly teach and practice the third-person singular "-s" in language activities to improve accuracy in its use. Students need to be made aware that it will be necessary to use it correctly especially in academic writing.

In the next section, the methods used in prior research investigating languaging are examined.

2.3 Different forms of corrective feedback used in prior research to stimulate languaging

2.2.7 discussed the types of languaging learners use in reaction to different forms of feedback. Although there are some overlaps in the contents, this section focuses on examining the different forms of corrective feedback used in prior research to stimulate languaging. 2.3.1 discusses the effects of reformulation, followed by 2.3.2, which compares the effects of direct and indirect corrections. Then 2.3.3 describes necessary revisions to the present study, in light of the flaws in preceding studies.

2. 3. 1 Corrective feedback through "reformulations"

Most of the previous research used "direct corrective feedback" or "reformulation." Direct corrective feedback refers to feedback in which teachers use editing symbols, such as underlining or insertion symbols, or write a correct form next to or near the target structure, with deleted or added linguistic items, if necessary. Reformulation refers to feedback in which teachers rewrite the texts of learners in correct forms. Corrective feedback through reformulations could also take the form of comparing the learners' written work with a fully reformulated text written by a native speaker of the target language (see 2.2.7 for details and Table 4 below).

Thornbury (1997) argues that the advantage of using reformulation is that "it allows

for learners at different stages and with different needs to notice different language features" (1997: 328), not solely to focus on specific forms in the target language, but also to provide better models of sentence construction or ways of conveying meaning. Accordingly, some research gives careful consideration to the use of reformulation in writing feedback, especially when teachers want to stimulate languaging to solve specific linguistic problems.

Table 4
Types of feedback in previous research

Researcher(s)	Year	Types of teachers' feedback	time allocated for languaging (mins)
Swain, M. and Lapkin, S.	2002	Comparison with a reformulated text	10
Watanabe, Y.	2004	Comparison with a reformulated text	Unexplained
Sachs, R. and Polio, C.	2007	Comparison with a reformulated text	15
Storch, N. and Wigglesworth, G.	2010	Comparison with a reformulated text Indirect corrective feedback (codes, underlining, inserted symbols and brackets)	15
Ishikawa, M.	2012	Comparison with a native speaker's model translation	3
Suzuki, W.	2012	Direct corrective feedback by a native English instructor	30

Storch and Wigglesworth (2010) investigated the efficacy of different forms of feedback and made some important suggestions (see 2.2.7 for details). They concluded that the participants who received "indirect corrective feedback," in which errors were identified in codes, underlining, inserted symbols and brackets, produced more language-related

episodes (LREs)[4] than those who received texts that were fully reformulated by a teacher who was a native speaker. Moreover, the participants who received more reformulations from the teacher tended to produce fewer LREs. In fact, one of the pairs who received 53 reformulations produced only one LRE during the languaging stage and only two LREs during rewriting time, whereas the other pair who received 16 reformulations produced 19 LREs and 16 LREs, respectively. Storch and Wigglesworth point out that too much correction discourages learners, and that some of them end up trying to memorize the whole text.

Qi and Lapkin (2001) also give cause for caution. They examined the extent to which reformulation induced learners to notice language-related problems while thinking aloud about a text. The participants of this study were two adult Mandarin-speaking ESL learners who had different proficiency levels, one high and the other low. The research design consisted of three stages. First, the participants were asked to write a text based on a picture prompt for 30 minutes. While they were writing, they were also asked to think aloud. The texts were collected and reformulated into native-like models. Four days later, the participants received their original texts and the reformulated versions and were asked to compare them and notice the differences while thinking aloud. An immediate retrospective

[4] Swain and Lapkin (1998) define "language related episodes" as any part of learners' talk about the language they produce, whether it be forms, usages, questions or corrections.

interview was also administered, to clarify the participants' intentions when they made utterances such as *oh* or *yeah*. One week later, as a post-test, the participants received their original texts and were asked to rewrite them. Qi and Lapkin counted the number of LREs and examined the changes in the participants' writing. They found that the rate of noticing language-related problems was dependent on the learners' English proficiency level. In the first stage, the high-level learner, Wu, resolved 64% of language-related problems while thinking aloud, whereas the low-level learner, Su, resolved only 25% of them. Qi and Lapkin also point out that having the learners verbalize while they were engaged in the writing task in the first stage could have been a trigger for them to notice their linguistic problems in the next stage. In fact, Qi and Lapkin argue that the learners produced more LREs in stage 2, so that of "the nine problems that Wu noticed but failed to resolve correctly in Stage 1, seven (78%) were noticed in Stage 2, and that of the twelve problems that Su noticed but did not resolve correctly in Stage 1, nine (75%) were noticed in Stage 2" (2001: 292). Furthermore, they suggest that the quality of noticing significantly affects improvements in further writing. They claim that if the learners notice their linguistic problems and understand the reasons for them, they have a better chance of correcting their mistakes in the next composition, whereas little or no change occurs when the learners only notice the problems without understanding the reasons for them. Although both learners improved their writing in the final stage, Qi and Lapkin argue that reformulation seems to be more beneficial for higher

level learners than for lower-level ones, for whom noticing linguistic problems and understanding the reasons for them may be difficult with their limited linguistic knowledge.

Judging from these results, it seems advisable to provide explicit feedback, such as by underlining or using symbolic codes, not simply by reformulating texts, when the learners are junior high school students who have just started studying English, since the objective is to raise their awareness of the wrong usage of target sentences.

2. 3. 2 “Direct written corrections” vs. “Indirect written corrections”

Another study worth considering here is that by Sachs and Polio (2007), which examined the effect of direct written correction compared to other forms of correction. The participants in this study were 15 high-intermediate learners of English, aged 18 to 30, and all were tested under three different conditions, as they received three different types of feedback: direct written corrections, native-speaker reformulations, and reformulations including thinking aloud. The study was designed in a three-day sequence. On the first day, the participants were asked to write a composition based on a picture prompt for 30 minutes. Two days later, they received feedback and compared their writing for 15 minutes. The next day, they were asked to rewrite the text for 20 minutes. The results of the first study showed that direct error correction was more effective than reformulation or reformulation including thinking aloud. The changes in the accuracy rates among the participants involved in direct

error correction, reformulation, and reformulation including thinking aloud were 96.4%, 90.0%, and 81.4%, respectively. Nevertheless, Sachs and Polio insist that the learners who were provided with the reasons for changes, or who used metalanguage while thinking aloud, did better at producing correct sentences within the revision time than the others. They argue that of "the 100 observed instances of awareness at the level of understanding, the use of metalanguage and the provision of a reason were associated with 78 changes, [and] only 22 errors were left unchanged when metalanguage was used and a reason was provided" (2007: 82). However, it remained difficult for the learners to explain the reasons for the changes they made. In fact, in the post-study interviews, six learners answered that the direct error correction had been easier than reformulations in helping them find their mistakes and remember them. To clarify whether they used memorization in direct error correction, in the modified second study, Sachs and Polio allowed a weekend to intervene between the feedback and the revision time.

In the second study, they divided the participants into four groups: 12 received error corrections, 11 received reformulations, 16 received reformulations including thinking aloud, and 15 constituted controls. However, the results followed the same pattern as before (see 2.2.7 for details). Judging from this result, they concluded that direct error correction by teachers is more effective in helping learners notice linguistic problems and improve their accuracy in writing than the other forms of feedback. Although this conclusion coincides

with the findings of other researchers (e.g., Carroll and Swain 1993; Ferris 2002; Chandler 2003; Ellis et al. 2006; Bitchener 2008; Bitchener and Knoch 2009), some caveats about the research design by Sachs and Polio (2007) are in order. According to their design overview, the participants were allowed to "take notes on the feedback they were given" (2007: 77). In other words, they were allowed to do written languaging that facilitated their understanding during the feedback period. If the participants who received direct error correction made written metalinguistic explanations in their mother tongue, it could have helped them to understand and remember the corrections. Therefore, to make a simple comparison, the participants who received direct error correction should not have been allowed to take notes during the feedback period.

Chandler (2003) offers a convincing counterpoint to Sachs and Polio's conclusion. She argues that self-correction is beneficial for both students and teachers. She claims that students learn more from self-correction, and that teachers need less time for error correction. She examined four different types of feedback: direct written corrections, underlining with descriptions, descriptions of type only, and underlining. She also noted the time that teachers took to provide the various types of feedback. The participants in the research were 36 students, in total, majoring in music at an American conservatory. They were divided into two groups in the same ESL writing course taught by the same teacher. The first group consisted of 1 Hispanic and 20 Asian undergraduates, and the second group consisted of 15

East Asian students. The participants were asked to write about 8 pages of text in each class and to revise them after receiving feedback from the teacher. All of them received the four different types of feedback at different times during the semester. At the end of the semester, the participants were asked to fill out questionnaires about their attitudes towards the four different types of feedback. More than two-thirds of them responded that direct written corrections were the easiest to understand. However, about half of them considered underlining with descriptions, in which the teacher wrote error codes such as *ww* or *punc*, was the easiest way for them to understand what kind of errors they had made and was the most helpful way for them to improve their writing. Moreover, some learners wrote intriguing comments. One said, "I like correction the most because it's easier to change, but I have to say the underline and describe (sic) helped me the most; I like that" (2003: 288). Another learner commented that she learned the most from the "underlining," as she said, "I can look up correct answers by myself, and this makes easier (sic) to remember the mistakes I made so I won't do it again" (2003: 289). Chandler also maintains that underlining is the fastest way for teachers to provide feedback. Her research showed that it took 0.8 minutes per 100 words for underlining, 0.9 minutes for direct corrections, and 1.0 minute for underlining with descriptions. The results of this research offer a positive perspective on feedback in the form of underlying from the viewpoints of both learners and teachers.

In contrast, Sachs and Polio (2007) state that providing a reformulated text and letting

learners express their thoughts out loud in L2 requires more time, and it can be a hinderance for learners to compare their original stories with reformulated versions carefully, as they cannot do two things at the same time. However, there are some flaws in their research. As some learners noted in the interview, "finding the words to express what they wanted to say made it harder to concentrate on the corrections themselves" (2007: 83). In fact, this reaction is to be expected, as all the participants in this study were non-native speakers of English, so it was naturally difficult for them to explain the reasons for their errors in English. A similar problem appears in a study by Bowles and Leow (2005), in which the participants were asked to think aloud metalinguistically in either L1 (English) or L2 (Spanish) while comprehending 861-word texts and completing certain tasks. This exercise meant they had to focus on both form and meaning at the same time. Although the researchers allowed learners to use either L1 or L2, as they thought thinking aloud would be constrained by their language proficiency, "think aloud" itself seemed to be a burden for the learners. This burden was pinpointed by one learner, who said that it was distracting to have to talk aloud while he was doing the tasks, regardless of whether he used L1 or L2. Although Sachs and Polio (2007) pointed out that when learners could provide the reasons for their errors with metalanguage during the think-aloud stage, and they could produce correct sentences in the revision time, for some learners, thinking aloud itself seems to be difficult, since they have to focus on both form and meaning at the same time while they are engaging in comprehension tasks which are

relatively long.

Clearly it is important to make sure that the learners comprehend the purpose of metalinguistic explanations and to let them simply focus on form. Therefore, to allow students of lower proficiency in English to benefit from languaging, the think-aloud exercise should be done using short texts and in the language they feel more comfortable using, that is, in their L1.

Some research suggests that teachers should discuss linguistic problems with learners, either orally or in written form. For example, Bitchener et al. (2005) investigated the effect of three different types of instruction: direct written feedback with 5-minute individual conferences, direct written feedback only, and no corrective feedback. The results showed that the group receiving direct written feedback with individual conferences improved accuracy the most during a 12-week period. Another researcher, Sheen (2007), also found that direct metalinguistic correction, in which the teacher wrote comments explaining the correct form, increased accuracy in writing over time more than direct correction alone. Even though it might be unrealistic for a teacher to provide such individual treatment all the time, it should be possible to arrange for learners to discuss their linguistic problems in class. This idea derives from Vygotsky's zone of proximal development (ZPD). Vygotsky states that "learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with peers"

(Vygotsky 1978, in Kozulin et al. 2003: 252). Therefore, to stimulate the learners' languaging, it would be better to make them form pairs and correct errors in their writing cooperatively.

2. 3. 3 Necessary revisions for the study

Examining the empirical studies mentioned above provides some important suggestions about the design of this research. First, before starting the experiment, it is necessary to make sure that the learners understand the metalinguistic explanation (e.g., "When the subject of a sentence is *he*, *she*, or someone's or something's name in the present tense, add '-s' to the main verb."). Second, to stimulate the learners' languaging, it is necessary to ask them to correct errors collaboratively in pairs or groups. With collaborative work, it should be possible to examine the ripple effects of languaging, in that the learners who cannot solve their linguistic problems also improve their grammatical accuracy after listening to their partner's languaging. Third, to enable a comparison between the languaging group and the direct correction group, the learners in the latter group were asked not to take any notes of the correction they received, but instead just to tick marks to the corrections to make sure they confirm what, why, and how the teacher changed the forms in the written feedback. If the learners took notes, it could be deemed written languaging. Hence, the present study avoided letting the students in the direct correction group take notes. If learners' verbalizations included keywords such as "the third person," or "the third-person singular

'-s,'" or "because of the subject he/she," they were recognized as oral languaging with "metalinguistic explanations." In contrast, if learners examine grammatical forms using only inner speech and do not verbalize or mark the texts, it obviously cannot be recognized as languaging in this study. Finally, it is necessary to carry out a delayed post-test to determine long-term effects.

2. 4 Analysis of languaging in empirical research

This section examines how prior research analyzed participants' actual use of target structures. Obligatory occasion analysis and target-like use analysis have often been used to calculate accuracy scores when learners use specific linguistic features. As an example of obligatory occasion analysis, Brown (1973) proposed simply dividing the number of correct uses of a target morpheme by the total number. He calculated the number of obligatory occasions for the use of a particular form and the percentage of accurate uses. As for target-like use analysis, Pica (1983a) proposed taking into account the overuse of morphemes. She calculated accuracy scores using the following formula:

$$\frac{n \text{ correct suppliance in contexts}}{n \text{ obligatory contexts} + n \text{ suppliance in non-obligatory contexts}} \times 100 = \text{percent accuracy}$$

Ellis and Barkhuizen (2005)

Nassaji and Swain (2000) investigated whether oral corrective feedback based on ZPD

improved the use of English articles, *a, an, the*, and 0 (zero), for two Korean adult learners of English. First, the participants were asked to write compositions about a topic that the researcher assigned. After that, they had a tutorial with their teacher. Nassaji and Swain tape-recorded the four consecutive tutorial sessions and transcribed what the teacher and the learners said to examine whether this interaction was effective in eliciting appropriate responses. In addition, they undertook quantitative analysis, not only examining the compositions from each session but also administrating cloze tests that contained errors the participants had made during the tutorial sessions. For this quantitative analysis, they counted the number of obligatory contexts for the use of articles and examined the percentage of correct uses of articles in the context in each composition. Other researchers who examined the effects of corrective feedback in the use of English articles have also applied obligatory occasion analysis in assessing writing test scores (e.g., Bitchener et al. 2005; Ellis et al. 2008).

On the other hand, Sheen (2007), who examined the effect of corrective feedback in the use of indefinite and definite articles, *a* and *the,* adopted target-like use analysis. She employed three procedures: a speed dictation test, a narrative writing test, and an error correction test. In the scoring guidelines for the narrative writing test, she noted that "in the case of the word prompt *park*, both 'in the park' or 'in a park' were possible, so noun phrases containing this word were excluded from coding" (2007: 266). She claims that free-writing

tests sometimes do not show clear obligatory contexts, whereas dictation tests do. Therefore, it can be difficult to distinguish the overuse of articles, which is the reason target-like use analysis was used in this study.

Pica (1983a) showed different percentages of accuracy for the production of the morphemes progressive "-ing," progressive auxiliary, and past irregular. She applied both methods of analysis, obligatory occasion and target-like use. Another study that she undertook in 1983 suggested that formal instruction appeared to influence the production of some structures but had little effect on others (Pica 1983b). She applied target-like use analysis to take account of overuse of a morpheme, and she found that the learners who studied the progressive "-ing" through formal instruction tended to overgeneralize, saying things like "I going home for lunch," or "I want to seeing you." When the learners studied the plural "-s" morpheme, however, those who received formal instruction produced more accurate sentences than those who did not (Freed 1991). This result indicates that learners may overgeneralize some morphemes (i.e. the new form enters their L2 knowledge) as a result of formal instruction but it may take a while for the use to become accurate, while their use of other morphemes may become more accurate as an immediate result of formal instruction. Since the participants in Pica's study were 18 adult native speakers, and the data which she collected were hour-long audio-taped conversations about personal topics, there were enough data enabling target-like use analysis. Adopting target-like use analysis was not

feasible in the present research, however, because of the limited amount of data collected.

Ellis and Barkhuizen (2005) point out that whether the researcher identifies obligatory occasions for tokens or for types will also affect the result. They suggest that consistency in decision making, explicitness in coding, and clarity in formulating rationale are important in identifying obligatory occasions. All these considerations were taken into account in developing the analytical framework for the present study. Although Sheen (2007) points out the difficulty in making clear distinctions regarding obligatory contexts in free-writing tests, in the present research, the learners are assigned a composition task that necessitates the use of the third-person singular "-s." Obviously, it is relatively easy to decide whether a third-person singular "-s" is obligatory or not compared to other grammatical morphemes such as present progressive and articles. Therefore, as in the study by Nassaji and Swain (2000), obligatory occasion analysis was deemed a suitable way to examine how accurately the students used the third-person singular "-s" in the present study. Furthermore, it was deemed worthwhile to undertake a token and type count of the verb forms.

2. 5 Differences between the present study and the study by Swain et al.

The present study is based on the study by Swain et al. (2009). However, there are six significant differences in the research design between the present study and Swain et al. (2009). Table 5 shows these differences.

Table 5
Differences between the study by Swain et al. (2009) and this study

	The study by Swain et al. (2009)	The study in 2013
Participants	9 university students studying French	64 public junior high school students studying English
Birthplace of the participants	Canada 6 Hong Kong; moved to Canada at age four 1 Czechoslovakia 1 Pakistan 1	Japan 64
Proficiencty level	intermediate	low
Target structure	voice (active, passive, and middle)	third-person singular "-s"
Form of languaging	Private talk	Pair talk
Mode of languaging	Oral	Oral or written
Timing of the post- test	10 minutes later	10 days later
Types of languaging	paraphrasing, inferencing analyzing, self-assessment, rereading	metalinguistic explanations, repetition

First, the participants of this study are junior high school students whose English proficiency level is low, whereas the ones of Swain's study were university students whose French proficiency level was intermediate. It is generally agreed that learning languages through grammatical rules is effective for adult learners (Lightbown and Spada 2006). Therefore, analyzing errors using languaging was found to be effective for university students. It will be necessary to examine whether it is also applicable to junior high school students.

The second difference is the participants' first language. All of the participants in this study were born in Japan and their mother tongue is Japanese, whereas most of the

participants in Swain's study were Canadian and their first language was English. Sultana (2009) states that cultural differences affect learners' willingness to accept peer correction. She states that learners in Asian cultures tend to believe teachers are the ones who should provide new knowledge, so learners feel anxiety when faced with the idea of collaborative learning and learner autonomy. She claims that although the participants in her study, language learners in Bangladesh, regarded peer correction as a useful technique, they wanted teachers to recheck their answers. These results are consistent with those in Roskams (1999). Most of the 217 Chinese learners in his study considered peer interaction useful, but about five percent did not enjoy collaborative learning, and in these cases, there was obviously less interaction between them. If Japanese junior high school students prefer teachers' corrections, the result of languaging might be different from that in Swain's research. Characteristics such as the learners' English proficiency, age, and cultural background will be important issues in examining the effect of languaging.

Third, the target structure in this study is the third-person singular "-s," whereas that in Swain's study was the use of voice. The reason for selecting this grammatical morpheme is based on second language acquisition studies that have shown it to be acquired late despite of being introduced at an early stage in foreign language instruction (see 2.2.9 for details).

The fourth difference between the current study and Swain et al.'s study is that the form of this study involves pair work, whereas Swain's study focused on private exercises.

In the present study, it was assumed that some students would not be able to solve the linguistic problems on their own, as they are beginners, whereas if they act in pairs, even if one student cannot find the correct forms alone, they may be able to solve the linguistic problems collaboratively with a partner.

Fifth, this research focuses on examining languaging in which the learners use both oral and written modes at the same time, so that whether there is a difference in the effect between the use of either oral or written languaging alone and the use of both oral and written modes of languaging at the same time can be determined.

Finally, in this study, the types of languaging focus on “metalinguistic explanations” and “repetition,” whereas Swain et al. classified self-assessment and rereading as types of languaging. As mentioned previously, metalanguage plays an important role in the process of languaging; in fact, empirical research shows metalanguage may be the most significant cognitive tool in solving linguistic problems (see 2.2.7 for details). However, it is doubtful that utterances such as “This is not clear,” or “I am not sure what this means,” or just reading the texts help learners to understand the grammatical concepts. Therefore, self-assessment and rereading are not categorized as types of languaging in this study.

2. 6 Summary of literature review

In sum, this chapter, first, presented an overview of the historical background that led to the emergence of languaging, and then discussed the features and definition of languaging, and finally reviewed the methods of data analysis used in empirical studies.

There were many useful suggestions gleaned from the empirical research. First, it is noteworthy that learners who used metalanguage and considered the reasons for their errors improved their accuracy in post-tests (see, e.g., Sachs and Polio 2007; Knouzi et al. 2010; Storch and Wigglesworth 2010). This mediation, that is, the process of becoming explicitly aware of the reasons for errors, is the core element of languaging. Second, it is significant that the quality and quantity of languaging are affected by the types of tasks and the learners' English proficiency (see, e.g., Suzuki and Itagaki 2009, Swain et al. 2009, Ishikawa 2012). Learners with high-intermediate proficiency produced more grammar-oriented languaging than those with low-intermediate proficiency. To get lower-intermediate learners to focus on form and use grammar-oriented languaging, teachers need to provide assistance to draw learners' attention to forms, such as explaining languaging beforehand. Third, not only do teachers need to draw learners' attention to forms, they need some ingenuity in methods of giving feedback. Learners who received implicit feedback, such as comparisons of reformulated texts by a native speaker of English, tended to find lexical problems more easily than grammatical ones. Furthermore, learners who received explicit feedback tended to

produce more grammar-oriented languaging. The participants in the present research were junior high school students. Taking the results of Suzuki's research into consideration, it was deemed necessary to give feedback explicitly to stimulate the learners' languaging. Furthermore, it was decided that the tasks should be dealt with in pairs to enable collaborative learning.

At the same time, some modifications to the research design were deemed necessary. First, although Swain et al. (2009) studied the effects of languaging on the grammatical concept of voice (active, passive, and middle) in French, the present research investigated the third-person singular "-s," which L2 learners have difficulty in acquiring. Second, the present research adopted obligatory occasion analysis, not target-like use analysis, since the number of the sentences was limited, and it was clear whether the third-person singular "-s" was obligatory or not. Third, Swain et al. (2009) included self-assessments, and straightforward rereading as languaging. However, they were not categorized as types of languaging in the present study. Fourth, there was no comparison group in the study by Suzuki and Itagaki 2009, Swain et al. 2009, or Suzuki 2012. To examine the effects of languaging, a comparison group which had a different treatment, in this case, receiving direct correction only, was indispensable. Finally, in the previous research, the same topic, text or contents were provided as a post-test (Swain et al. 2009, Storch and Wigglesworth 2010, Ishikawa 2012, Suzuki 2012). It is obviously easy to compare the results between the pre-

test and the post-test if the same topic is used. However, some students may try to memorize the whole text, which would make the result of languaging difficult to interpret. Therefore, in the present research, a different topic was used in the pre-test and the post-test.

3. Pilot studies

This chapter explains the details of the research and the research methodology of the pilot studies that were carried out in 2010 and 2011 in classroom settings. In Swain et al. (2009), languaging was found to be beneficial to some learners but not to others. Therefore, the pilot studies were designed to examine its effects in detail.

The aim of the first pilot study, which was administered in 2010, was to investigate whether languaging was effective in helping seventh-grade junior high school students improve their accuracy in the use of grammatical structures such as the third-person singular "-s" in writing. The finding showed significant differences between the experimental group and the control group in the delayed post-test. Although the first pilot study was premature, this result might be indicative of the effect of languaging in improving grammatical accuracy in the use of the third-person singular "-s." However, a high standard deviation in the experimental group was also found in the results on the post-tests. This result indicates that some students in the experimental group improved their accuracy but not others. Therefore, the second pilot study focused on whether different types of languaging have different effects in the acquisition of grammatical features.

Based on the results of the first pilot study, the second pilot study investigated (1) whether languaging was effective in helping seventh-grade junior high school students

improve their accuracy in the use of the third-person singular "-s" in writing and speaking, and (2) whether different types of languaging have different effects in helping the students achieve accuracy in the use of the third-person singular "-s." Special attention was given to the ripple effects of students' languaging, distinguishing those who listened to their partner's verbalizations silently or with repetition. The results showed that the students who corrected errors by themselves with metalinguistic explanations made distinct improvements between the pre-test and delayed post-test, as did the students who listened to their partners' metalinguistic explanations. However, some points clearly needed to be modified in terms of research methodology, viz: (1) the method of instruction, (2) the timing of the post-test and the delayed post-test and (3) the research procedure on the speaking test.

In the next sections, details of the pilot studies are explained.

3. 1 Pilot study one

3. 1. 1 Research question

The first pilot study addressed the following research question: To what extent can languaging be effective in helping young learners improve their accuracy in the use of the third-person singular "-s" in writing?

Holunga (1994) (see 2.2.2 for details) examined metalinguistic verbalization and showed the positive effects of languaging. However, the participants in that research were

adult second-language learners who had an advanced English proficiency level, and she examined only oral accuracy in the use of verb forms. Therefore, the first pilot study examined the effects on writing. Watanabe (2004) (see 2.2.2 for details) examined the effects of languaging on writing and showed the results to be positive. However, the post-test that Watanabe designed was a rewrite of the original story. Hence, it was unclear whether the participants really acquired the target form, as they might have used a memorizing strategy. Therefore, the first pilot study adopted a writing task that was new, but which contained the target form, in the post-test.

The hypotheses of the first pilot study were as follows:

H_0 The learners' grammatical utterances will show no improvement after languaging. If this is the case, languaging might have little effect on learners' output, or on these learners.

H_1 The learners' grammatical utterances will improve after languaging. If this is the case, languaging has some effect on the accuracy of the learners' output.

H_2 The learners' grammatical accuracy will improve temporarily after languaging, however, the improvement will be lost gradually. If this is the case, languaging might only have a short-term effect.

3. 1. 2 Participants

The participants in the first pilot study were 95 public junior high school students, aged 12 to 13. They had taken a 45-minute foreign language class once a week for six years in elementary school, which aimed at building a positive attitude towards communication in English. After entering junior high school, they had a 50-minute foreign language class three times a week. They studied English based on the textbook *New Crown 1* (2006),[5] one of the texts officially approved by MEXT.

In the first pilot study, three groups were formed: one was an experimental group, and the other two were control groups; they consisted of 32, 30, and 33 students, respectively. The teachers who instructed the students were all Japanese women. The experimental group was instructed by the present researcher, who, at the time, had about 13 years of experience as an English language teacher. The other two control groups were instructed by different teachers, one who had more than 10 years of teaching experience, and the other who was younger, with only a few years of experience. The purpose of the pilot study was explained

[5] The Japanese government-prescribed the Courses of Study for lower secondary schools, enforced in 2008, stated that teaching materials should be focused on building up students' communication skills, and it was expected that actual language usage situations and language functions would be taken into consideration to help students comprehensively develop their language skills. Furthermore, according to the students' ages and interests, a variety of topic should be picked up, such as the daily life or the customs of people around the world or in Japan, including stories, geography, history, traditions, culture, and natural science. *New Crown 1* (2006) covers a variety of topics: about the people around us, about aspects of culture in Japan and around the world.

to both of them, and they followed the same treatment in class, except for the languaging stage with the experimental group.

3. 1. 3 Materials

The target grammar in the first pilot study was verb forms, especially the use of the third-person singular "s." The reason this grammatical item was chosen was that despite its having simple and clear-cut rules, many English learners make persistent errors with this form. Tono (2007) argues that errors of correspondence involving personal pronouns and verb forms in writing will decrease according to the level of English proficiency. However, at the same time, he points out that this sort of error cannot be eradicated completely. Therefore, both the pilot studies and main study focused on examining the third-person singular in light of the students' long-term needs.

3. 1. 4 Procedure

Learner language data were collected according to the following procedure. For the experimental group, at first, the researcher showed a picture of her friends and introduced them using the third-person singular "-s" while interacting with the students. Then, the researcher elicited the students' ideas about the difference between a sentence using the first-person singular and one using the third-person singular, drawing their attention to form. Then

the students took part in a language activity in which they introduced their friends to each other. After a one-week interval, as the first stage of the experiment, they were asked to write a composition based on the theme “Me and the people/animals around me”; that was a pre-test. The researcher did not specify the number of sentences which they should write. Some students wrote a maximum of twelve sentences in ten minutes. Their written work was collected and the errors that contained the target structure were selected and typed onto a new sheet of paper, so that the students could not identify who had written which sentence (see Appendix A). One week later, the sheet was distributed to the students. In the second stage, the students were asked to correct the errors in the distributed sheet in pairs; that was oral languaging. All their dialogues were recorded. After languaging, they took an immediate post-test. At this time, they were asked to write a new text on a new theme, “Introduce *Sazae-san*, a famous animation character, to your English teacher” (see Appendix B). The reason a different theme was chosen for the post-test compared to the pre-test was to avoid having the students use a memorization strategy. One week later, as the third stage, a delayed post-test was administered. The students were asked to write another composition: “Please tell me about *Doraemon*, another famous animation character in Japan” (see Appendix C). Then the results were compared. The time allocated for the writing was 10 minutes, and the students were not allowed to use a dictionary or talk with their friends or teachers during the tests.

The control group received the same treatment as the experimental group, except for the treatment in the second stage. While the experimental group did languaging, the students in the control group worked on a reading comprehension exercise involving a story about a dog trained to help the deaf and her owner. These students learned the meaning of the text and the use of the target structure through reading aloud and questions and answers with the teachers.

All the oral and written data were collected, and the data from the participants who could not take all the tests were eliminated. Hence, the data on 85 students were used for the analysis. Figure 3 shows the procedural flow of the first pilot study.

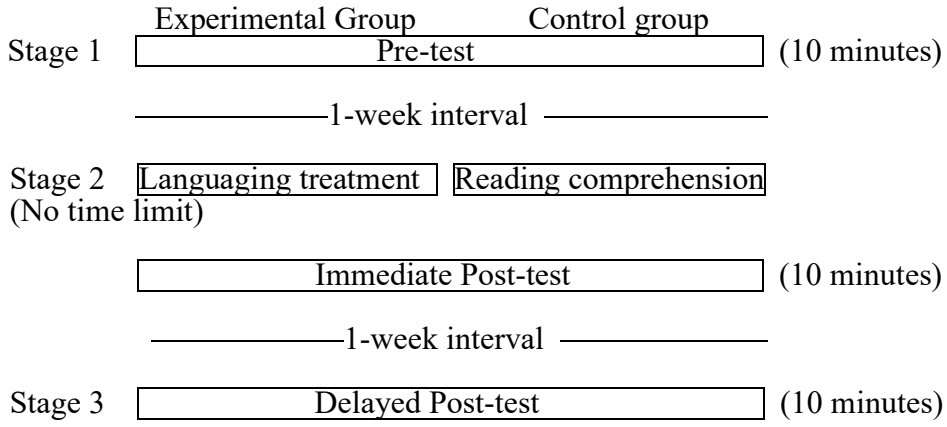


Figure 3. Procedural flow of the first pilot study

3. 1. 5 Data analysis

A token count of the number of sentences that the students wrote was adopted to roughly measure their fluency. At the beginning of the analysis, the average number of correct verb forms that the experimental group (Ex) and control groups (Cot) produced was calculated. In the pilot studies, spelling mistakes and morphemic errors were ignored; that is, as long as the students used the third-person singular "-s," the sentences were regarded as correct. The first pilot study focused on examining the verb forms. Therefore, all the correct verb forms of substantive verbs and the third-person singular "-s" were counted, but the errors which were not related to the target grammar were ignored. Here is an example of the analysis:

(1) This is *Doraemon*. ✓
(2) He bersday is September thirdth. ✓
(3) He lakes *Dorayaki*. ✓
(4) He not lakes a mouse. ×
(5) He is sister *Dorami*. ×
(6) She lakes *Melon Pan*. ✓
(7) She not lakes a cockroach. ×
(8) He on Monday plays tennis. ✓
(9) He on Wednesday Stardys Japanies. ×
(10) He on Thursday plays baseball. ✓
(11) He on Friday uses computer. ✓

correct… ✓
incorrect… ×

Here, the total number of sentences is 11, and the number of correct verb forms is 7; two

errors involve *does*, one error involves a be-verb, and one error involves the third-person singular "-s." Concerning the negative form of the third-person singular "-s," such as (4) and (7) above, it is apparent that although the students may have understood the subject was the third-person singular and thus added "-s," they had not grasped how the third-person singular "-s" behaves in negations. Concerning (5) above, although the student used the third-person singular be-verb correctly, the answer might have indicated that the student did not understand the grammatical concept of the verb properly. Concerning (9) above, although the student added the third-person singular "-s," this answer apparently indicated that the student did not understand the rule when the verb ends with "-y." Therefore, these sentences were categorized as incorrect in the first pilot study.

3. 1. 6 Results

The quantitative findings on the pre-test and post-tests in writing are examined here. Table 6 shows the results from tokens and the standard deviation (SD) of each group.

Table 6
Average number of correct verb forms in the pre- and post-writing tests in the first pilot study

Group (N)	Pre-test			Immediate post-test			Delayed post-test		
	M	TNS	SD	M	TNS	SD	M	TNS	SD
Ex (27)	6.15	7.22	2.76	6.07	7.04	3.40	7.67	10.30	4.03
Cot1 (29)	4.62	6.28	2.91	5.61	6.55	3.24	5.10	8.86	3.65
Cot2 (29)	4.24	5.83	2.16	5.00	6.38	3.34	6.21	10.10	3.99

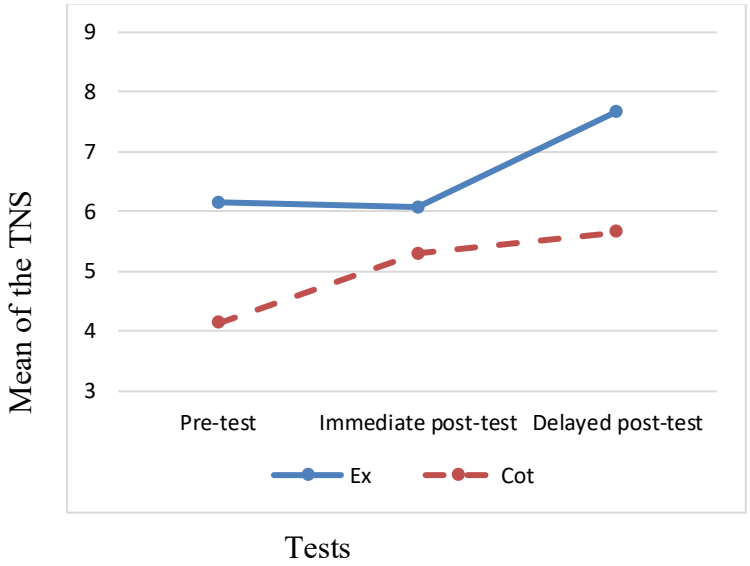
Note: M= mean. TNS= total number of sentences. SD= standard deviation.

The two control groups were consolidated, as a Mann-Whitney U test showed no significant difference on the pre-test between control group 1 and 2 (see Table 7 and Figure 4).

Table 7
Average number of correct verb forms in the pre- and post-writing tests in the first pilot study, Version 2

Group (N)		Pre-test			Immediate post-test			Delayed post-test		
		M	TNS	SD	M	TNS	SD	M	TNS	SD
Ex	(27)	6.15	7.22	2.76	6.07	7.04	3.40	7.67	10.30	4.03
Cot	(58)	4.13	6.05	2.57	5.30	6.47	3.30	5.66	9.48	3.87

Note: M= mean. TNS= total number of sentences. SD= standard deviation.



Note: Ex= experimental group. Note: Cot= control group.

Figure 4. Mean distribution in the writing test in the first pilot study (TNS range 0 to 14)

The students in the experimental group showed no improvement in the total number

of sentences they produced between the pre-test and the immediate post-test but showed improvement in the delayed post-test. This result may suggest that the students had grasped the grammatical rule, remembered it longer, and wrote more fluently than the students who did not experience languaging. The control group, on the other hand, showed improvement in the total number of sentences they produced in the pre-test, immediate post-test, and delayed post-test. However, even though the students produced more sentences in the delayed post-test, the accuracy rate of both groups showed no improvement from the immediate post-test. A simple comparison is impossible, since the results also showed a significant difference between the experimental group and the control group in the pre-test. In addition, the amount of data was small, and a normal distribution graph in statistical analysis could not be expected. Therefore, the results were examined using the Statistical Package for Social Science (hereafter, SPSS). A Wilcoxon signed-rank test and a Mann-Whitney U test were adopted to compare the results within a group and between groups (see Tables 8 and 9).

Table 8
Differences in the writing test in the first pilot study

Group (N)	Test Comparison	
	pre-post	post- delayed
Ex (27)	.432 (.152)	.002* (.605)
Cot (58)	.025* (.297)	.184 (.176)

Note: Each effect size of index *r* is shown in parentheses.
*p< .05

Table 9
Differences in the writing test between groups in the first pilot study

Test Comparison		
pre	post	delayed
.007* (.293)	.262 (.123)	.025* (.246)

Note: The effect size of index *r* is shown in parentheses.
*p< .05

The Wilcoxon signed-rank test indicated a significant difference between the immediate post-test and delayed post-test for the experimental group (p=.002), and between the pre-test and the post-test for the control group (p=.025). Furthermore, the Mann-Whitney U test showed a significant difference between the two groups in the pre-test (p=.007) and delayed post-test (p=.025).

3. 1. 7 Discussion

Although the first pilot study was premature, there were some noteworthy implications. First, as to the research question whether languaging is effective in helping young learners improve their accuracy in the use of a grammatical structure in writing, it is evident that languaging can scaffold their declarative knowledge of grammar, as the results on the delayed post-test showed. However, there was no significant difference between the pre-test and immediate post-test. Although it is possible that this result is a consequence of the time needed for new knowledge to become consolidated, the topics taken up in the tasks might have affected the

results as well. In the pre-test, the participants were asked to write about themselves and the people/animals around them. This task may have been easier for the students to address than writing about *Sazae-san*, an animation character, in the immediate post-test. The researcher provided some information about *Sazae-san* in advance to help students write the composition, but they mainly followed the provided information rather than expressing anything on their own. It must have been more creative and easier for the students to write about themselves and the people around them. Furthermore, there were two fatal flaws in the research design of the first pilot study. First, in the pre-test, sentences using the first-person singular, such as "I like baseball," were included in the analysis, whereas in the two post-tests, there were no sentences using the first-person singular. Second, the use of verb forms, including the third-person singular "-s" and substantive verbs, were treated without distinction and counted together. Therefore, a simple comparison of the results between the pre-test and the immediate post-test was impossible. It was, thus, clearly indispensable to distinguish the third-person singular "-s" form of substantive verbs and that of main verbs in the second pilot study.

Another notable result was the high standard deviation of the experimental group in the post-tests. This result indicates that some students in the experimental group improved their accuracy but not others. A similar finding was also observed in Watanabe's research (2004), in which the learner Ken, who initiated a dialogue to solve his linguistic problems,

improved grammatical accuracy in the post-test, while his partner, Yoji, who listened to Ken's languaging, failed to correct his mistakes in the post-test. Therefore, in the second pilot study, the ripple effect of learners' languaging, distinguishing those who listened to their partner's verbalizations silently or with repetition, was investigated to examine whether different types of languaging have different effects in the acquisition of grammatical features. In addition, the first pilot study did not examine the effect of languaging on speaking. Consequently, two other considerations, viz., (1) whether languaging is effective in helping young learners improve their accuracy in the use of a grammatical structure, the third-person singular "-s," in writing and speaking and (2) whether different types of languaging have different effects in helping learners achieve accuracy in the use of the third-person singular "-s," were taken up in the second pilot study (see 3.2.1 for details).

Another crucial point modified in the research design for the second pilot study was to exert greater control over the classroom settings. Although in the first pilot study the purpose of the research and the method of carrying it out were explained to the teachers involved, it was impossible to control their daily lessons. It was also difficult to control the dates that the teachers administered the tests, because of the timetable of the school and the teaching plan of each class (see Table 10).

Table 10
Schedule of each test in the first pilot study

	Pre-test	Immediate post-test	Delayed post-test
Experimental group	Dec.7th	Dec.16th	Dec.22nd
Control group 1	Dec.7th	Dec.17th	Dec.24th
Control group 2	Dec.15th	Dec.21st	Dec.22nd

In addition, there was a term exam before the pre-test and other factors such as drills that might have affected the results. Therefore, in the second pilot study the timing to carry out the research was taken into consideration. Third, it was necessary to modify the way feedback was given to stimulate the students' languaging. In the first pilot study, written texts containing errors were distributed, and the students were asked to find the errors and correct them, as seen in Table 11 (see Appendix A for details).

Table 11
Excerpt from the worksheet used by the participants in the first pilot study

次の英文を読み，ペアで文法をチェックしてみよう！どこが違うかな？

(Read the next sentences and correct the errors with your partner. Where is the error?)

(1) I practices tennis in the morning.
(2) My father play baseball too.
(3) But my mother isn't play sports.

Among the 16 pairs, two could not correct any of the errors, as neither of them could find any. Two pairs came up with wrong answers, and one pair, actually one person who took the initiative, corrected the errors silently without any discussion. To avoid this situation, it

is necessary to highlight the errors and have a warm-up stage in which the students practice metalinguistic explanations, as in the research by Swain et al. (2009). In other words, students need to explain the rule by repeating, "When the subject of a sentence is *he*, *she*, or someone's or something's name in the present tense, add '-s' to the main verb." Finally, the method of analysis was also problematic. There was no distinction in the analysis between the answers of those students who used the third-person singular verb but wrongly and the answers of those who could not use the third-person singular verb at all (e.g., in the first pilot study, a sentence such as "He on Wednesday Stardys Japanies," was deemed wrong, even though the student used the third-person singular "-s.")

3. 2 Pilot study two

The second pilot study was designed with a different set-up, in that the participants studied at different junior high schools. In addition, one more research question was added, to examine whether different types of oral languaging have any effect on enhancing learners' grammatical accuracy.

3. 2. 1 Research questions

Specifically, the second pilot study addressed the following research questions:

(1) To what extent is languaging effective in helping young learners improve their

accuracy in the use of a grammatical structure, the third-person singular "-s," in writing and speaking?

(2) To what extent do different types of languaging have different effects in helping learners achieve accuracy in the use of the third-person singular "-s"?

The hypotheses corresponding to each of the research questions were as follows:

Hypothesis of research question (1)

H_0 The learners' grammatical utterances will show no improvement after languaging. If this is the case, languaging might have little effect on learners' output, or on these learners.

H_1 The learners' grammatical utterances will improve after languaging. If this is the case, languaging has some effect on the accuracy of learners' output.

H_2 The learners' grammatical accuracy will improve temporarily after languaging, however, the improvement will be lost gradually. If this is the case, languaging might only have a short-term effect.

Hypothesis of research question (2)

H_0 The learners' grammatical accuracy shows no significant difference among the types of languaging they use. If this is the case, the quality of languaging will have little or no effect on the accuracy of learners' output.

H_1 The learners who use a certain type of languaging will improve their accuracy in the use of a grammatical structure more than other learners who use other types of languaging.

If this is the case, the quality of languaging will affect the accuracy of learners' output.

3. 2. 2 Participants

The participants in the second pilot study were 33 public junior high school students, aged 12 to 13. The female-to-male ratio was almost even, with 15 females and 18 males. They had taken a 45-minute foreign language class which aimed at building a positive attitude towards communication in English once a week for two years before they entered junior high school, after which they had a 50-minute foreign language class three times a week. They studied English based on the textbook *New Crown 1* (2006), which is one of the officially approved textbooks by MEXT. In the second pilot study, there was no control group. Instead, participants were classified into three groups according to the types of languaging they used. Group 1 consisted of students who corrected errors actively using metalinguistic explanations, Group 2 of students who could not correct the errors by themselves but simply repeated their partners' utterances, and Group 3 of students who listened to their partners' utterances silently. All the groups were taught by the researcher, who, at the time, had about 14 years of experience as a teacher.

3. 2. 3 Materials and procedure

The target structure of the second pilot study was again the use of the third-person singular. However, the second pilot study focused only on examining the third-person singular "-s" on main verbs, excluding substantive verbs. Therefore, the number of correct uses of a substantive verb, such as "Tomoko is my friend," was not counted. Furthermore, the second pilot study focused solely on affirmative sentences using the third-person singular "-s." Hence, negative sentences, such as "He doesn't play the guitar," were not counted. Interrogative sentences, such as "Does she like cats?" were also not part of the analysis, since none of the students used this form.

At first, the researcher made an oral presentation, as shown below, to introduce her friends, while showing a picture to set up the context:

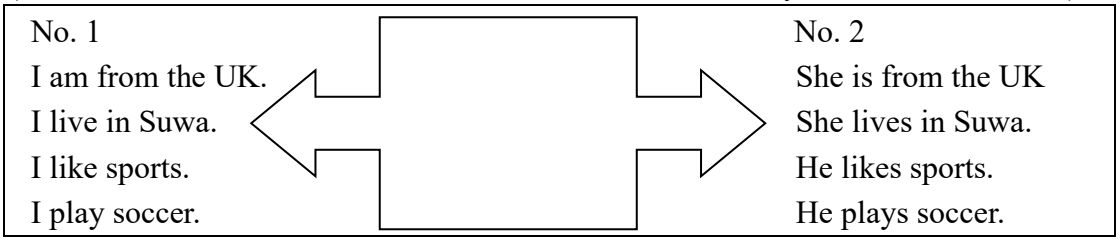
> Please look at the picture. This is me.〔I pointed to the picture and the students laughed.〕
> Today, I am going to tell you about my friends.
> This is my friend Rachel. She is from the UK.
> She likes Japanese food very much. She lives in *Suwa* with her husband.
> This is Rod. He is Rachel's husband. He likes sports.
> He plays soccer every Sunday.

After this oral introduction, which included verbs in the third-person singular "-s" forms in declarative sentences, the students were asked to compare the difference between the sentences in No. 1 and No. 2 below (Table 12). First, they were asked to think individually, then in pairs, and lastly, as a class. The purpose of this step was to have the students devise

a metalinguistic explanation by themselves.

Table 12
Worksheet used by the participants in the second pilot study

①と②のでは何が違うだろう？気がついたことを表の中に書いてみよう！
(What is the difference between No.1 and No.2? Write what you noticed in the list.)



After that, the students focused on the target structure through teacher-led instruction and language activities which involved introducing someone. Next, a pre-test, an immediate post-test, and a delayed post-test eight days later were administered to examine the students' writing performance. In the writing tests, first, the students were asked to write a composition for ten minutes based on the theme "My Family." They were asked to write as many sentences as possible in 10 minutes. Then their work was collected, and this time, only the errors in the use of the third-person singular "-s" on main verbs, excluding substantive verbs, were underlined. All the other kinds of errors, such as the misuse of pronouns and articles, as well as spelling mistakes, were corrected. After that, the students were asked to correct the errors in the use of the third-person singular "-s" in affirmative sentences, while discussing them in pairs. Although errors involving the third-person singular "-s" in negative

sentences were not analyzed in the second pilot study, these were also underlined, and the students were asked to correct them, too. The reason for this pair work is based on evidence from empirical studies showing that even if one student cannot find the correct forms alone, it is still possible to solve linguistic problems with a partner. Furthermore, it makes it possible to examine the ripple effects of languaging, that is, to see if the students who cannot solve their linguistic problems also improve their grammatical accuracy with the assistance of their partner's languaging. The students' dialogues were recorded. Then an immediate post-test in which the students were asked to write a new composition on the same theme as the pre-test, "My Family," was administered. However, they were asked to focus on different family members than those mentioned in the pre-test, to avoid simply copying their original composition. If the students could not write about other family members, the researcher allowed them to write about their friends or the people around them. Eight days later, the delayed post-test was administered. In addition, in the second pilot study, a post-test and a delayed post-test to examine their speaking performance were administered. After the writing tests, the students were asked to speak about the same theme, "My Family, or the people around me." Each student had an IC recorder and recorded his or her utterances by themselves. The data from the participants who could not take all the tests or who were not involved in the languaging stage were eliminated. Hence, the data on 29 students were used for the analysis. All the results were compared in terms of the degree of engagement in

languaging: active participation, passive participation, or negative participation. Figure 5 shows the procedural flow of the second pilot study.

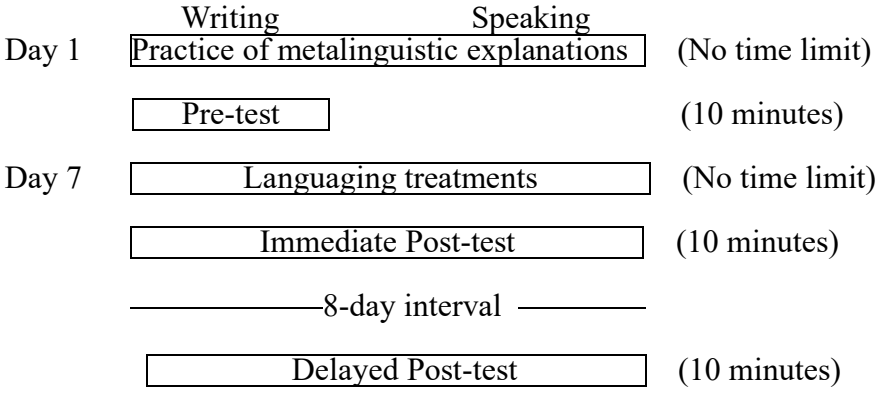


Figure 5. Procedural flow of the second pilot study

3. 2. 4 Data analysis

To count the number of sentences that the participants wrote/spoke, a token count and a type count of the verb forms were made. The expressions which did not contain a subject and verb to form a clause were eliminated (e.g., *practice almost every day).

Examples of corrections:

(1) He play the piano and the ~~erekuton~~ electone.

(2) He is like soccer.

(3) He uses a computer.

If students used a general verb following the copula *is*, such as in sentence (2) above, they might have misunderstood *is* as the form used for the third-person singular. However, the goal of the second pilot study was for the students to acquire the grammatical concept of

the third-person singular "-s" for general verbs, and example (2) indicates that the student did not understand the grammatical concept properly. Hence, this kind of error was analyzed as incorrect. Judging from the results, the participants fell into three groups (see Table 13). Group 1 consisted of students who corrected errors actively using metalinguistic explanations, Group 2 of students who could not correct the errors by themselves but simply repeated their partners' correct utterances, and Group 3 of students who listened to their partners' utterances silently. In the second pilot study, it was necessary to decide what qualified as metalinguistic explanations. If students' verbalizations included keywords such as "the third person," or "the third-person singular '-s,'" or "because of the subject he/she," they were recognized as metalinguistic explanations. Utterances of self-assessment, such as "I don't know," or "It's difficult," and acts of rereading compositions were not regarded as languaging.

Table 13
Three types of languaging classified in the second pilot study

Languaging Sequences	Group code
A:「ええ…これ 全部さ have の所 has でしょ?」 (Well.. these are all *has* not *have*, aren't they?) B:「そうだね。has だよ。」 (That's right. They should be changed into *has*.) A:「He だから。」 (as the subject is *he*.) B:「そう。has これも has。」 (Yes. This should be *has* and this one, too.)	A and B were both classified in Group 1 (Students corrected the errors with a metalinguistic explanation.)
C:「is like is live 何でいけないの? 分からない。」 (Why are these not OK? I cannot understand.) D:「He だから "-s"。likes lives。」 (You need "-s" as the subject is *he*.) C:「 "-s"? "-s"?」 D:「is がいらないの。He likes He lives。」 (You don't need *is*. These should be *He likes*. and *He lives*.) C:「He likes He lives。できた!」 (*He likes He lives*… I did it!)	D was classified as Group 1 and C as Group 2 (C did not seem to understand the reason and simply repeated the utterance of D.
E:「直していい?」 (Can I correct it?) F:「いいよ。」 (Sure.) E:「あぁ，分かった。三単現の "-s"。」 (I got it! Here is the third-person singular "-s.") E:「これは *is* がいらないんじゃない?」 (Maybe, you don't need *is* here.) F:「いらない?」 (I don't need *is*?) E:「いらない。直したけど。」 (No. I corrected them all.)	E was classified as Group1 and F as Group 3 (E took the initiative in talking and F just watched what E did.)

As a result, ten students were categorized as falling into Group 1 (named the active participation group), eight into Group 2 (the passive participation group), and five into Group 3 (the zero-participation group). Four students simply reread their compositions, and two students only made utterances of self-assessment. Hence, the results of these six students were eliminated from the analysis. Possibly, the researcher's explanation about the

languaging activity was not fully understood by these students.

3. 2. 5 Results

The quantitative findings on the pre-test and post-tests in writing and speaking are examined here. Table 14 shows the average number of correct verb forms in the writing as a token count.

Table 14
Average number of correct verb form tokens in the pre- and post-writing tests in the second pilot study

Group	Pre-test			Immediate post-test			Delayed post-test		
	M	TNS	SD	M	TNS	SD	M	TNS	SD
Group1	3.60	4.80	2.77	4.40	5.00	1.77	7.10	7.70	3.78
Group2	0.38	1.88	1.49	2.63	2.88	1.66	1.88	2.75	2.74
Group3	0.00	2.60	1.70	2.40	4.00	2.44	1.80	4.20	3.19

Note: M= mean. TNS= total number of sentences. SD= standard deviation.

Table 14 shows that the number of sentences which students wrote increased from the pre-test to the delayed post-test, especially among the students in Groups 1 and 3. Group 1 showed improvement in both the number of sentences and the accuracy rate of the verb forms. This result means that they rarely made errors when using the same verb. In addition, although the students in Group 3 just listened to their partners' utterances silently, in the post-tests, they were able to write more structures which contained a subject and verb to form a clause than in the pre-test. In comparison, the students in Group 2 did not improve as

much in the total number of sentences or in their accuracy rate between the immediate post-test and the delayed post-test. Thus, the results were re-examined in a type count.

As shown in Table 15 and Figure 6, the average number of correct verb forms in Group 1 increased gradually from the pre-test to the delayed post-test. The students in Group 2 and Group 3 also wrote more correct verb forms in the post-tests than in the pre-test. However, neither group showed any significant difference in the delayed post-test.

Table 15
Average number of correct verb form types in the pre- and post-writing tests in the second pilot study

Group	Pre-test			Immediate post-test			Delayed post-test		
	M	TNS	SD	M	TNS	SD	M	TNS	SD
Group1	3.30	4.40	2.56	4.10	4.80	1.82	5.10	5.40	2.30
Group2	0.25	1.63	1.34	2.50	2.88	1.69	1.88	2.63	2.13
Group3	0.00	2.40	1.52	2.00	3.40	2.00	1.80	3.60	2.66

Note: M= mean. TNS= total number of sentences. SD= standard deviation.

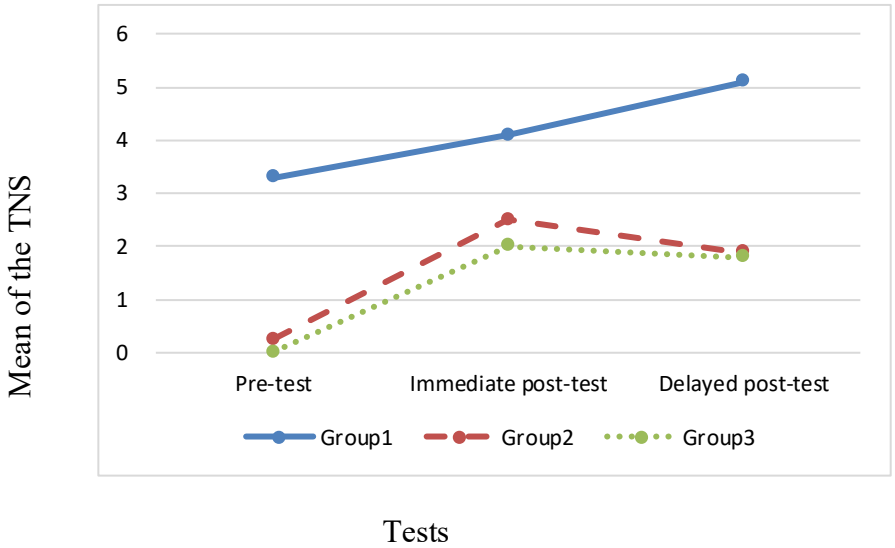


Figure 6. Mean distribution in the writing test in the second pilot study (TNS range 0 to 7)

The results between tests in each group were also examined using SPSS. The Wilcoxon signed-rank test indicated a significant difference between the pre-test and delayed post-test in Group 1 and between the pre-test and post-tests in Group 2. However, it showed no significant difference in the results of Group 3 (see Table 16).

Table 16
Differences in the writing test in the second pilot study

Group	Test Comparison					
	pre-post		pre-delayed		post-delayed	
Group1	.071	(.572)	.013*	(.787)	.054	(.611)
Group2	.027*	(.781)	.026*	(.788)	.301	(.366)
Group3	.063	(.831)	.180	(.601)	.564	(.259)

Note: Each effect size of index *r* is shown in parentheses.
*p< .05

In the first pilot study, the results showed that the number of correct verb forms written

by the students in the languaging group increased in the delayed post-test, whereas those written by students in the control group did not. A similar tendency was observed in the second pilot study. Another meaningful result is that the students in Group 2 increased in the number of correct verb forms they wrote in the immediate post-test and maintained this level in the delayed post-test. This result might be the effect of Vygotsky's ZPD, which maintains that children can develop their linguistic knowledge through interaction with adults or peers whose level of proficiency is beyond their own (Ellis 1997). Hence, even if the students in Group 2 could not find the errors by themselves, they apparently understood the rules while listening to their partners' metalinguistic explanations and repeating them aloud. This result seems to confirm that languaging has some ripple effect on the accuracy of the learners' output. On the other hand, the results in Figure 6 show that the number of correct verb forms in Group 1 increased in the post-tests compared to the other two groups. This result may mean that the amount of learners' engagement in languaging affected the results.

In contrast, in the speaking test, none of the groups showed a significant difference between the immediate post-test and the delayed post-test. Table 17 shows the average number of correct verb forms in the speaking test listed as a token count.

Table 17
Average number of correct verb form tokens in the pre- and post-speaking tests in the second pilot study

Group	Immediate post-test			Delayed post-test		
	M	TNS	SD	M	TNS	SD
Group1	3.40	4.90	1.88	4.20	5.70	2.59
Group2	1.88	2.50	1.53	2.13	2.75	1.63
Group3	2.00	3.40	1.06	1.40	4.20	1.55

Note: M= mean. TNS= total number of sentences.SD= standard deviation.

Although the students did not improve much in their oral output, Table 17 shows that the number of sentences which students spoke increased from the immediate post-test to the delayed post-test. In the delayed post-test, the students of Group 1 also wrote more sentences than in the immediate post-test, and their accuracy rate also showed improvement. This result may mean that their fluency and automaticity in generating the correct form improved. On the other hand, although the students in Group3 produced more sentences in the delayed post-test, their accuracy did not improve from the immediate post-test. In other words, they were able to produce more structures which contained a subject and verb to form a clause, but their use of the third-person singular "-s" was still not completely accurate. Table 18 and Figure 7 show the number of correct verb forms in the speaking test, listed as a type count.

Table 18
Average number of correct verb form types in the pre- and post-speaking tests in the second pilot study

Group	Immediate post-test			Delayed post-test		
	M	TNS	SD	M	TNS	SD
Group1	3.10	4.60	1.50	3.70	5.10	2.30
Group2	1.75	2.38	1.51	1.88	2.50	1.31
Group3	1.80	3.20	0.93	1.00	3.40	1.48

Note: M= mean. TNS= total number of sentences. SD= standard deviation.

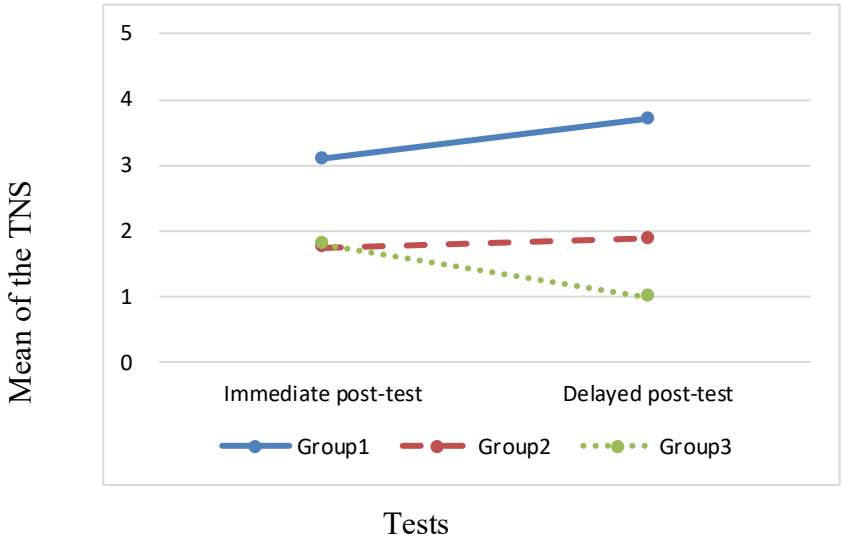


Figure 7. Mean distribution in the speaking test in the second pilot study (TNS range 0 to 8)

None of the groups showed a significant difference between the immediate post-test and the delayed post-test. Furthermore, a comparison between the results shown in Table 17 and Table 18 does not show significant differences, indicating that the students did not use a variety of verbs.

The data were also submitted to SPSS, and the results between the Immediate post-

test and the delayed post-test for each group were analyzed. However, the Wilcoxon signed-rank test indicated no significant differences (see Table 19).

Table 19
Differences in the speaking test in the second pilot study

Group	Test Comparison	
	post-delayed	
Group1	.348	(.297)
Group2	.748	(.114)
Group3	.102	(.731)

Note: Each effect size of index *r* is shown in parentheses.

3. 2. 6 Discussion

Here, the results of the second pilot study are summarized in relation to research questions (1) and (2) first, and then the implications of the findings are discussed.

The first research question concerned whether languaging is effective in helping learners improve their accuracy in the use of a grammatical structure in writing and speaking. Concerning the writing test, judging from the results of the quantitative data, two groups showed improvements in accuracy, especially the students in Group 1, who corrected errors by themselves with metalinguistic explanations and maintained this improvement until the delayed post-test. The students in Group 2 who listened to their partners' metalinguistic explanations also increased the number of correct verb forms in their compositions. From these results, it is apparent that languaging had a certain effect in improving grammatical accuracy in writing, not only for the learners who verbalized metalinguistic explanations,

but also for those who listened to their partners' output.

The second question concerned whether different types of languaging have different effects on the acquisition of grammatical features. In the second pilot study, the participants used two types of languaging, metalinguistic explanation and repetition. The results show that Group 1 produced a larger number of correct verb forms than did Group 2. This result indicates that the degree of learners' engagement in languaging has some effect on the learning of grammatical features. Ten students in Group 1 were diligent, and all of them became members of the student council when they were in the ninth grade, one as the president and two as vice-presidents. In other words, they showed leadership or had extroverted personalities compared to the students in the other groups. Therefore, such personality traits may also have affected the finding that they showed initiative in the languaging stage.

Concerning the speaking test, preliminary analysis showed improvement from the immediate post-test to the delayed post-test, but SPSS showed no significant difference between the two tests. This result is not surprising, as speaking is a spontaneous, online skill, during which it is difficult for students to simultaneously pay attention to meaning and to form. In writing, the students could reread their work and revise the errors they noticed, but in speaking it was more difficult for them to monitor their utterances during their performance. However, there were two intriguing findings. First, there was no significant

difference between the token analysis and the type analysis of correct verb forms, implying that the students did not produce as many sentences in speaking as in writing, or that they did not use as large a variety of verbs in their utterances as in their compositions. Therefore, in the main study, it became necessary to investigate what kind of verbs they use in speaking as compared to those in the textbook. Second, some students noticed their errors in the third-person singular "-s" while they recorded their speech, or afterwards when they listened to their recordings. Interestingly, almost all the students asked to retry the recording after the test. For example, one student said, "Ms. Ushiyama, I forgot to add '-s,' Please let me do the recording again." She apparently noticed her grammatical errors while verbalizing. Other students rephrased their utterances while they were recording. Here are some examples:

> My name is ×××. This is *Kaishi*. He play・・・plays baseball. He practices it al・・・almost every day. えっと・・・ あ 間違えた (Um… oh, I made a mistake.) He lives in ×××. He likes baseball. Thank you. This is *Kenta*. He practice・・・He play baseball ・・・plays baseball. He like likes piano. He doesn't practice baseball every day. Thank you.

> My name is ×××. This is *Yoshinori*. He is my father. He works every day. He lives・・・He lives in Vietnam. He・・・He use・・・He uses a computer. He doesn't・・・He doesn't likes ・・・He doesn't like cat. ちょっと待って (Hang on.) Thank you.

> My name is ×××. This is *Yu*. He likes soccer. He・・・He is a good soccer player. He treasure soccer ball. He play soccer. He practice almost every day. He has・・・He has a dog. He doesn't have cat. He use soccer・・・He uses soccer ball. He studies・・・He studies English every day. Thank you.

My name is ×××. This is *Anna*. She lives in ×××. She likes Japanese. A, sorry. She likes science. She have・・・She has a cat. She wants pens and watch. She plays the piano. She eat also・・・almost every day. She practice・・・ She doesn't have a dog. She doesn't like *okonomiyaki*. She doesn't play tennis. Thank you.

My name is ×××. This is *Seiga*. He likes soccer. He plays soccer. He has a two brother and one sister. He practice soccer almost あ・・・(Ah…) He practices soccer almost every day. Thank you.

My name is ×××. This is *Yosuke*. He likes soccer. He・・・He likes Tokyo Disney land. He・・・have・・・has one brother. He loves, lives in *Koizumi*. Thank you.

In the immediate post-test, four students out of ten in Group 1 rephrased and corrected their mistakes in the verb form. In the delayed post-test, one in Group 1, one in Group 2 and two students out of five in Group 3 rephrased and corrected their uses of the third-person singular "-s." Although the quantitative analysis showed no significant differences, it seems that students tended to pay more attention to form after languaging.

However, some issues still need to be addressed concerning the second pilot study. First, although the practice of metalinguistic explanations was emphasized, some students may not have fully understood the rules about the third-person singular "-s." There is a possibility that some students who understood the rules may have improved their accuracy regardless of whether they did languaging or not. In addition, although this problem is the same as in the first pilot study, the second pilot study was carried out right after introducing the target structure before a term exam. Therefore, some diligent students may have studied by themselves at home, which could have resulted in a higher score on the post-test. Thus, it

was judged that the main study should be carried out under conditions in which the participants understand the grammatical rules of the target language well and are not affected by a term exam. Second, in the second pilot study, a pre-test was not designed to examine the effects on speaking. Although the data showed no significant difference in the results on the speaking tests, it was difficult to draw a conclusion without carrying out a pre-test. Therefore, a speaking pre-test was conducted as well in the main study. Finally, to examine long-term effects, an eight-day interval was not enough. This timing might have been one of the reasons why no significant differences were found between the post-test and the delayed post-test among any of the groups. Thus, in the main study, a longer interval was set between the immediate and delayed post-tests.

4. Main study

The aim of the main study was the same as that in the second pilot study, to investigate (1) whether languaging is effective in helping seventh-grade junior high school students improve their accuracy in the use of the third-person singular "-s" in writing and speaking, and (2) whether different types of languaging have different effects in helping students achieve accuracy in the use of the third-person singular "-s." The pilot studies carried out in 2010 and 2011 were revised to verify the effects of languaging. Although there were flaws in the research methods, there were some intriguing results. First, languaging might have equal effect as a teacher's direct correction. Second, even if learners cannot correct their errors by themselves, if they repeat and write their partners' metalinguistic explanations, they can improve grammatical accuracy on a subsequent occasion, a finding confirmed in the second pilot study. This chapter explains the details of the main study and the research methodology adopted in 2013. First, the experimental conditions modified from the pilot studies are described, and then the aim of the study and the methods are described.

Here are the eight experimental conditions modified in light of the two pilot studies.

(1) Two groups receiving different treatments were instructed by the same researcher in order to make the classroom settings comparable.

(2) A theme familiar to the students was adopted for the tasks.

(3) Administering the pre-test and the post-test before term exams was avoided.

(4) Students' errors were highlighted to stimulate languaging.

(5) Metalinguistic explanations were taught before the pre-test to help the students use them by themselves.

(6) The pre-test was administered before the speaking test to compare the pre- versus post-treatment effects.

(7) Long-term effects were examined.

(8) The effects of the different types of languaging that the students used were analyzed.

The main study was designed to overcome the shortcomings of the pilot studies.

4. 1 Research questions

The main study addressed the following research questions:

(1) To what extent is languaging effective in helping young learners improve their accuracy in the use of the third-person singular "-s" in writing and speaking?

(2) To what extent do different types of languaging have different effects in helping learners achieve accuracy in the use of the third-person singular "-s"?

The hypotheses of the first pilot study were as follows:

Hypothesis of research question (1)

H_0 The learners' grammatical utterances will show no improvement after languaging. If this is the case, languaging might have little effect on learners' output, or on these learners.

H_1 The learners' grammatical utterances will improve after languaging. If this is the case, languaging has some effect on the accuracy of learners' output.

H_2 The learners' grammatical accuracy will improve for a moment after languaging, however, the improvement will be lost gradually. If this is the case, languaging might have a short-term effect.

Hypothesis of research question (2)

H_0 The learners' grammatical accuracy shows no significant difference among the types of languaging they use. If this is the case, the quality of languaging will have little or no effect on the accuracy of learners' output.

H_1 The learners who use a certain type of languaging will improve their accuracy in the use of a grammatical structure more than those who use other types of languaging. If this is the case, the quality of languaging will affect the accuracy of learners' output.

Unlike the second pilot study in 2011, the effects of languaging on oral production as well as written production were examined in the main study, based on the hypothesis that if learners used both oral and written language to solve linguistic problems, it would help them deepen their understanding more than using either mode alone.

4. 2 Research method

4. 2. 1 Participants

The participants in the main study were 64 public junior high school students, aged 12 to 13, consisting of two classes: 32 in each group. The two classes were taught by the present researcher who had about 16 years of experience as a teacher. The students had a 50-minute foreign language class four times a week, an increase of 50 minutes compared to the pilot studies, due to a government mandate instituted in 2012. They studied English based on the textbook *New Crown 1*(2012), which was approved by MEXT.

For the data analysis, an assistant English teacher, who had worked at junior high schools and elementary schools for more than ten years, and his son, who studied at an international university, transcribed the spoken data. There were two main reasons for requesting their cooperation. One of the reasons was to avoid subjective analytical bias. It is commonly pointed out that solo investigators are always in danger of bias or misinterpretation (e.g., Yin 1984; Bell 2005). The other reason was to check whether or not the participants' utterances were intelligible to native speakers of English. The purpose of the research was explained to the transcribers beforehand, and they were asked to pay particular attention to the usage of the third-person singular "-s."

4. 2. 2 Materials and procedure

As in the pilot studies, the target structure of the main study was the third-person singular "-s" on main verbs chosen for the same reason mentioned in the previous chapter.

Just as in the second pilot study, the researcher, that is, the participants' English language teacher, first showed a picture of her friends to the students and gave an oral introduction to set up the context, as shown in Table 20. Then, the students were asked to compare the differences between the sentences in No. 1 and No. 2, as shown in Table 21.

Table 20
Teacher's oral introduction

Today, I am going to tell you about my friends. This is my friend Rachel. She is from the UK. She likes Japanese food very much. She lives in Suwa with her husband. This is Rod. He is Rachel's husband. He likes sports. He plays soccer every Sunday.

Table 21
Excerpt from the worksheet used by the participants in the main study

①と②のでは何が違うだろう？気がついたことを表の中に書いてみよう！
(What is the difference between No.1 and No.2? Write what you noticed in the list.)

No. 1	No. 2
I am from the UK.	She is from the UK.
I live in Suwa.	She lives in Suwa.
I like sports.	He likes sports.
I play soccer.	He plays soccer.

First, the students tried to find the differences individually, then in pairs, and lastly, as a class (e.g., "The subjects in the sentences on the right are *he* or *she*, whereas the subject in the sentences on the left is always *I*. There is an '-s' added to some of the verbs, such as *lives* and *plays*."). After eliciting the students' responses, the researcher explained that when the subject of a sentence is *he*, *she*, or someone's or something's name in the present tense, add "-s" to the main verb, as seen in *plays* and *likes*. This instruction was used for both groups, to have all the students produce a metalinguistic explanation by themselves. After that, the students learned the target structure through oral substitution drills, using picture cards and flash cards; through communicative activities, such as a "Who am I?" quiz; and through introducing others after reading the textbook, in which Ms. Brown, one of the characters, introduces her family in the UK. In the "Who am I?" quiz activity, first the researcher gave the students examples about a famous person or animation character as a model, and then students made their original quizzes. In the activity to introduce others, one day, the students interviewed their friends about their daily life (e.g., "What time do you get up?," "What time do you go to bed?," "What time do you eat breakfast/dinner?"), and then reported the results to another friend, and finally shared the results in class and found out, for example, the student who got up the earliest/who went to bed the latest. Another day, they interviewed their friends about what they like to do and reported it to another student, or to an assistant language teacher from Mexico; after that, they wrote it on a sheet of paper. In the

comprehension of the textbook activity, first the students listened to the story and then got the gist of the contents through questions and answers with the teachers. In total, the instruction and classroom activities took approximately 300 minutes.

In the pilot studies, a pre-test was administered without a sufficient time interval, thus leaving open the possibility that some students could not fully understand the rules governing the target structure and that others could improve their accuracy in the use of a grammatical structure for other reasons such as input from textbooks, language activities in class or drills. Furthermore, it was likely that if a pre-test was administered near a term exam, the results might be affected by it. Therefore, this time the students were given a four-month interval before the pre-test was administered. During those four months, they learned the use of the auxiliary verb *can*, the present progressive, and the adverb *how*, and then took the term exam which was administered one week before the pre-test. When the pre-test was administered, the students had started to study a new form: the past tense. Hence, it was possible to minimize the effects of the term exam.

The contents of the pre-test were the same as in the preliminary studies. First, the participants were to write a composition for ten minutes based on the theme “My Family.” They were asked to write as many sentences as possible in the time allotted. Then their work was collected, and for one group (hereafter, the “languaging group”), all the errors were underlined, whereas for the other group (hereafter, “direct correction group”), errors were

corrected directly.

Examples of corrections for the languaging group are shown below:

(1) This is my mother.
She live in *Chino*.
She treasure my family.
She like *wagashi*.
She don't like…

(2) This is *Keiko*.
She is my mother.
She works for my famiry.
She works six times^week.
She lives in *Chino*.

Examples of corrections for the direct correction group are shown below:

This is *Hiyori*.
She live(s) in *Chino*.
She use(s) a com**p**~~b~~uter.
She play(s) basketball.
She like(s) **d**~~b~~og.
She ha~~ve~~(s) a game.

There were two reasons direct correction was adopted for one group. First, it is the most common type of correction. Thus, it is worth comparing these two ways of treating errors. The second reason was a pedagogical consideration; as in the pilot studies, the main

study was designed as part of regular English classes; therefore, it was important to give the same instruction time and amount of treatment to both groups, to avoid being unfair to them. After the writing test, the students were asked to orally introduce one person they had written about to the teachers: the researcher and a native speaker of English who listened to their speeches. In the pilot studies, a pre-test involving speaking was not included; therefore, the positive effects of languaging on speaking were not examined. This time, both oral and written data were collected in the pre-test.

Three days later, the students received feedback, and the languaging group was asked to correct errors while discussing them in pairs, whereas the direct correction group simply checked the corrections. The direct correction group was asked to check using a pen, so as to make sure they noticed all the corrections. The dialogues of the languaging group were recorded and analyzed later. In addition, the students were asked to write metalinguistic explanations about their errors. The pilot studies showed that some students did not verbalize but thought deeply; that is, even if there were no verbalization, it would be possible to check their understanding from their notes. Furthermore, differences in understanding between the students who verbalized and those who wrote responses could be compared.

Ten days later, a post-test was administered, in which the students were asked to write a new composition on the same theme. In the second pilot research, the students were asked to focus on different family members than those mentioned in the pre-test to avoid simply

copying their original composition. However, in the main study, there was a ten-day interval between the languaging treatment and the post-test. Therefore, students were not given such a restriction. After that, they took a speaking test, which was the same as the pre-test. The ten-day interval was instituted based on the timing of post-tests in other empirical studies and on the contents of the textbook that the students used. Table 22 shows the timing of the post-tests in previous empirical studies, most of which came one week after the treatment of languaging. However, Guenette (2007) points out that short-term studies that examined whether feedback on form was effective in improving learners' grammatical accuracy in writing showed positive results, whereas longitudinal studies did not show that feedback had significant effects. The studies listed in Table 22 also show a negative correlation between the length of the interval and the result of the experiment. The studies of Storch et al. (2010) and Ishikawa (2012) indicate that long intervals after the treatment did not show that languaging had a positive effect. Herbert et al (1989) also point out that the results of an experiment tend to be affected by factors other than the treatment if it is conducted under longitudinal conditions. Therefore, it was necessary to conduct the post-test so that the influence of other factors due to timing was minimized. In that respect, the most likely external factor was input from the teacher's instruction, language activities with other students and textbooks. Therefore, the post-test was administered ten days after the students had studied the next unit in the textbook. The students were not likely to receive so much

explicit instruction on the use of the third-person singular "-s," as the target grammar of the next unit was the auxiliary verb *can*.

Table 22 *Timing and results on the post-tests in empirical studies about languaging*

Researcher(s)	Year	Interval between the treatment and the post-test	Results
Swain, M. and Lapkin, S.	2002	7 days	Two target learners' grammatical accuracy improved in the post-test.
Watanabe, Y.	2004	7 days	One learner who engaged in error correction using form-based languaging could use the target sentence correctly in the post-test, but the other learner. who just repeated his partner's utterance or read the text aloud. did not make changes between pre- and post-tests.
Sachs, R. and Polio, C.	2007	1 day	The direct error correction group produced more accurate sentences than the think aloud (languaging) group.
Swain, M. et al.	2009	7 days (An immediate post-test was also administered.)	The quality and quantity of languaging affected the results. High-languagers produced more correct sentences than low-languagers.
Knouzi, I. et al.	2010	7 days (An immediate post-test was also administered.)	
Storch, N. and Wigglesworth, G.	2010	3 weeks	Both the direct and indirect feedback groups improved grammatical accuracy, but the direct feedback group retained the accuracy longer than the indirect feedback group.
Ishikawa, M.	2012	4 weeks	There was no significant difference between the experimental group and the control group.
Suzuki, W.	2012	An immediate post-test was administered.	Learners improved their grammatical accuracy with the use of written languaging in response to direct correction by a native English instructor.

As regards to verifying the long-term effect of languaging, Ebbinghaus's forgetting curve (1913) was taken into consideration. According to him, human memory starts decaying immediately after learning; people forget 60% of what they have learned after nine hours, and 80% after one month (see Russell 1979). With this statement in mind, the two achievement tests that were administered one month later and eight months later were analyzed as well. These achievement tests were diagnostic. They were made by the board of education in Nagano Prefecture. They were administered in April and in November to establish the students' level of understanding, and to pinpoint areas needing improvement in teaching. These were 30-minute tests which consisted of ten to twelve questions, including some related to the third-person singular "-s." Therefore, the students' answers to those questions were extracted and analyzed to examine the long-term effects of languaging. The advantage of using the data from the achievement tests was that the students would not notice the researcher's intention to have them use the third-person singular "-s." Although Swain et al. (2009) argued that both the quality and quantity of languaging may affect learners' understanding of grammatical forms, in the main study of the present research, all the results of the writing and speaking tests were analyzed qualitatively in terms of the types or contents of students' languaging that occurred and not quantitively in the sense that the frequency of languaging was not taken into consideration (see Figure 8).

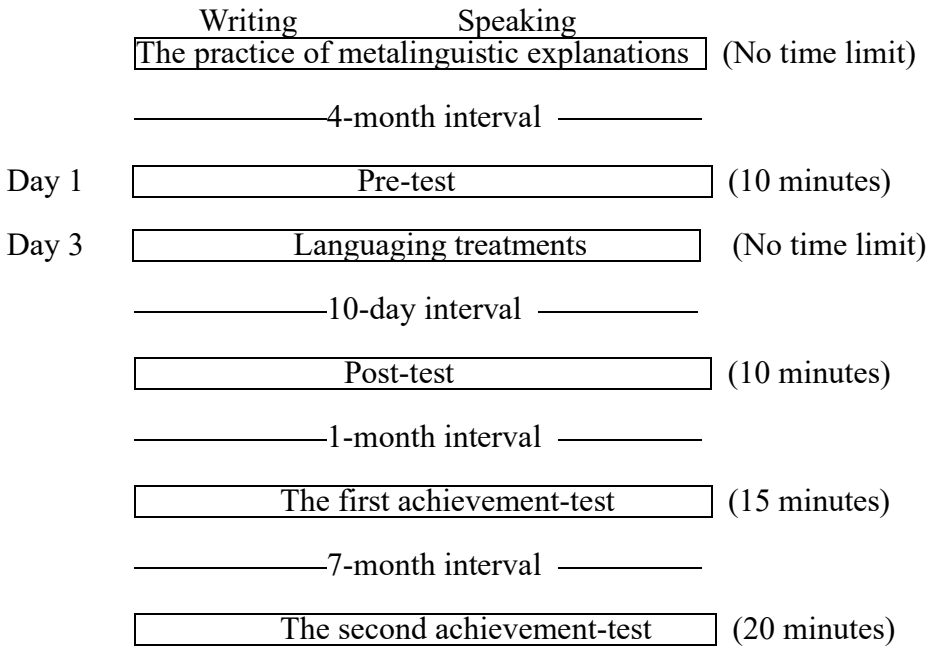


Figure 8. Procedural flow of the main study

4. 2. 3 Data analysis

As in the second pilot study, to count the number of sentences that the participants wrote/spoke, a token count and a type count of the verb forms were made. In addition, expressions which did not form a clause were eliminated. As with the pilot studies, the sentences in which words were overgeneralized in use, such as *haves* instead of *has*, were regarded as correct, assuming that the students have understood the rule regarding third-person singular "-s," namely that when the subject of a sentence is a third-person singular, such as *he she*, or someone's or something's name, it is necessary to add "-s" to the verb that follows the subject. However, as in the second pilot study, if the students used general verbs and be-verbs at the same time, their sentences were regarded as incorrect. Unlike the second

pilot study, which focused solely on affirmative sentences of the third-person singular "-s," the main study included negative sentences in the analysis, since many students in the second pilot study wrote sentences in the negative form in the post-tests. In the second pilot study, out of 23 students, only two did not use negative sentences in the writing and speaking tests. Some students wrote as many negative sentences as affirmative ones. Therefore, excluding sentences with negations would affect the calculation of the number of correct verb forms that the students wrote.

Here is an example of sentences produced by student C:

＜Pre-test＞

This is *Maiha*. She is like volle ball. She is very good player. She is live in ×××. She is like pezz. She is practice volle ball at ofter school.

Here, the total number of sentences is 3, as shown below, and there are no correct verb forms.

(1) She is like volle ball.

(2) She is live in ×××.

(3) She is practice volle ball at ofter school.

＜Post-test＞

This is *Yusuke*. He is my brother. He likes beasball. He practices beasball every day. He likes bog. He haves two bogs. He don't likes school. But he likes PE. He treasures family.

Here, the total number of sentences is 5, as shown below, and the number of correct verb

forms is 4; one error involves *does*.

(1) He likes beasball.

(2) He practices beasball every day.

(3) He haves two bogs.

(4) He don't likes school.

(5) He treasures family.

Concerning the negative form of the third-person singular "-s," such as in (4), as in the first pilot study, it was determined that although the students may have understood the subject was the third-person singular and thus added "-s," they had not grasped the structure of negation for the third-person singular verbs. Therefore, these sentences were categorized as incorrect. However, empirical research shows that learners take time to acquire English negations, and no matter which language background they have, they follow a similar sequence of acquisition: (1) no + V, (2) don't + V, (3) auxiliary + not (e.g., *can't* and *won't*), (4) different forms of the auxiliary do with both *n't* and *not* (e.g., *does not* and *did not*) (Ellis and Barkhuizen 2005). Therefore, the students' written production was analyzed considering such developmental stages. This point is further discussed in section 4.4.1.

In the second pilot study, the students were divided into three types: an active participation group, a passive participation group, and a zero-participation group. This time, the active participation group was subdivided into three smaller groups and the passive

participation group into two smaller ones. In the main study, there were three students who listened to their partners' utterances silently; just as in the second pilot study, these students were classified in the zero-participation group. Hence, this time there were six groups in all: Group 1 consisted of active learners who corrected errors using both spoken and written metalinguistic explanations (the MSW group); Group 2 consisted of those who corrected errors using only spoken metalinguistic explanations (the MS group); Group 3 consisted of those who corrected errors using written metalinguistic explanations (the MW group); Group 4 consisted of passive learners who could not correct errors by themselves but repeated their partners' correct utterances and took notes (the RW group); Group 5 consisted of those who repeated their partners' metalinguistic explanations but did not take notes (the R group); and Group 6 consisted of zero-participation learners who only listened to their partners' utterances silently, who did not make any metalinguistic explanations or take any notes (the Z group). Table 23 compares the ways in which learner groups were formed in the second pilot study in 2011 and the main study in 2013.

Table 23
Comparison of the studies in the second pilot study and the main study

Characteristics of the learners	2011(Pilot study Two)	2013 (Main Study)
The learners who corrected the errors actively using metalinguistic explanations	Active participation group	Spoken and written metalinguistic group
		Spoken metalinguistic group
		Written metalinguistic group
The learners who simply repeated their partners' utterances	Passive participation group	Repetition and writing group
		Repetition only group
The learners who listened to their partners' utterances silently	Zero-participation group	Zero-participation group

As in the second pilot study, if students' verbalizations included keywords such as "the third person," or "the third-person singular '-s,'" or "because of the subject he/she," they were recognized as metalinguistic explanations. However, if the students had noticed the verb needed "-s," but their comments did not include the keywords, in expressions such as "I think I need plural 's' here," or "I think I need 's' but I do not know why," these were not regarded as metalinguistic explanations. Although some students may analyze but not verbalize the grammatical form, only their actual verbal utterances were examined in the research. Table 24 is an excerpt of the types of languaging that the students produced (see Appendix G for details). Students tended to use metalinguistic explanations in the aforementioned practice stage (e.g., "The subjects in the sentences on the right are *he* or *she*,

whereas the subject in the sentences on the left is always *I*." "There is an '-s' added to some verbs, such as *lives* and *plays*.")

Table 24
Types of languaging classified in the main study

Languaging Sequences	Group code
N：「これね，s 付けなきゃ。use の時 s 付けなきゃ。」 (You need "-s" here, (after) the word *use*.) O：「use の時 s」 (I need "-s" when I use the word *use*.) N：「likes。he, she, 人の名前の時に s 付けるの。」 (This word also should be *likes*. When the subject of a sentence is *he*, *she*, or someone's name, you should add "-s" to the verb that follows the subject.) O：「he, she, 人の名前の時に s。全部？」 (When the subject of a sentence is *he*, *she*, or someone's name, I need to add "-s" to the verb that follows the subject. For all the verbs?) N：「うん。ちゃんと s 付けないとダメだから。三単現の s は結構いるよ。」 (Yes. You need "-s." We use a third-person singular "-s" for many sentences.) O：「（ワークシートを見返し）これだけ？」 (Did I correct all the sentences?) N：「うん。こんくらいかな。しっかり，she, he, 人の名前の時は，三単現の s を付ける。」 (You did. Don't forget when the subject of a sentence is a third-person singular, such as *he*, *she*, or someone's name, you should add "-s" to the verb that follows the subject.) N's note on the worksheet： 「しっかり三単現の s を付ける。」 (Don't forget to add a third-person singular "-s.") O's note on the worksheet： 「He や She の時は三単現の s を付ける」 (We need a third-person singular "-s" when the subject is *he*, *she*.)	N was classified as one of the spoken and written metalinguistic group and O as one of the repetition and writing group.
V：「何で？何で is いらないの？何でさ，is いらないの？」 (Why? Why don't I need *is* here? Why?) W：「三単現の s で，主語が he, she…」 (This word needs a third-person singular "-s." When the subject is *he*, *she*…)	V was classified as one of the repetition and writing group and W as one of the spoken metalinguistic group.

V：「人の名前？」 (And someone's name?) W：「人の名前だから，人の名前で，普通の一般動詞に s が付くから，be 動詞はいりません。」 (Yes, someone's name. So we add "-s" after the verb. You don't need a be-verb here.) V：「なるほど。is いらないということでいいですか？」 (I see. I don't need *is* here, right?) W：「はい。」 (Right.) V's note on the worksheet： 「動詞に s がついているから。be 動詞はいらない。主語＋（動詞＋s）でできるので be 動詞はいらない。」 (There is a third-person singular "-s." So I don't need a be-verb. That consists of the subject + verb+s. So I don't need a be-verb.) W did not take notes on the worksheet.	
R：「僕の間違えたところは，テニスのスペルを t・a・n・n・i・s のが，ん？違う。te だったところ。」 (I made a spelling mistake. I should use *te*, not *ta* for *tennis*.) S：「私が間違えたところは...」 (My mistake is…) R：「三人称。」 (A third-person (singular "-s") S：「全部三人称じゃなかったところ。」 (All mistakes are related to the third-person (singular "-s") R：「（それ）と？動詞が２つ。」 (And you used two verbs at the same time.) S：「動詞が２つ入ってたところ。」 (I used two verbs at the same time.) S did not take notes on the worksheet.	R was classified as one of the spoken metalinguistic group and S as one of the repetition only group.

4. 3 Results

This section first reports the results of the writing test in 4.3.1, followed by the results of the speaking test in 4.3.2.

4. 3. 1 Results of the writing test

First, regarding the writing test, the quantitative findings on the pre-test and the first post-test are described in relation to the first research question: To what extent is languaging effective in helping young learners improve their accuracy in the use of the third-person singular "-s" in writing and speaking? After a preliminary analysis, the data were re-analyzed with SPSS. Originally, there were 32 students in the languaging group and direct correction group, respectively. However, those who could not take part in all the stages, i.e. the pre-test, the languaging activities, and the post-test, were eliminated. Therefore, the number of participants in the languaging group turned out to be 27 and in the direct correction group 26.

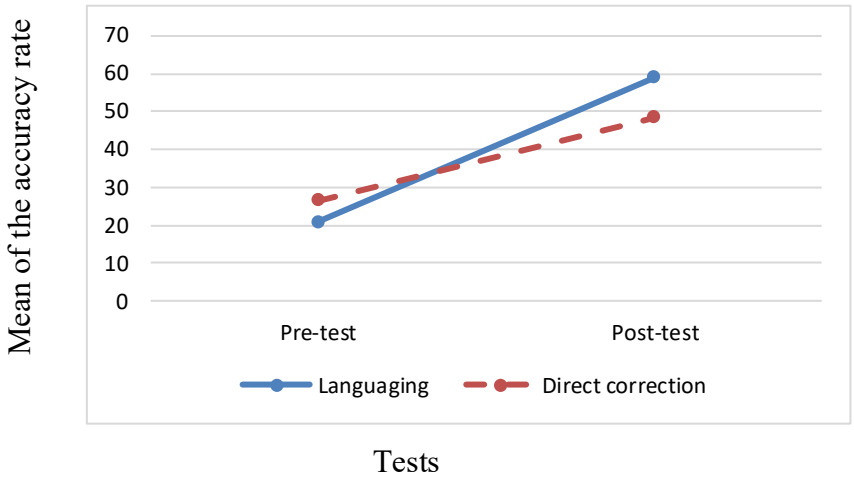
First, the accuracy rate of the students' writing was calculated by means of obligatory occasion analysis:

$$\frac{n \text{ correct suppliance in contexts}}{\text{total obligatory contexts}} \times 100 = \text{percent accuracy}$$

Ellis and Barkhuizen (2005)

The reason this type of analysis was adopted was that the theme of the tasks was the third person, so it was necessary for the students to use the third-person singular "-s" to perform the tasks. The students hardly made any errors related to overgeneralization; only one student made an error such as "*She can plays tennis." Therefore, the overuse of the target morpheme was not taken into account in further analyses. Figure 9 shows the percentage of

correct answers in the pre- and post-tests.



Note: Languaging= Languaging group. Direct correction= Direct correction group.

Figure 9. Changes in the accuracy rate in the writing test between the languaging group and the direct correction group

Then, the data were analyzed in a token and type count. Table 25 shows the average number of correct verb forms in the writing test listed as a token count.

Table 25

Average number of correct verb form tokens in the pre- and post-writing tests in the main study

Group (N)	Pre-test			Post-test		
	M	TNS	SD	M	TNS	SD
LA (27)	0.89	3.85	1.52	2.37	3.81	1.93
DC (26)	0.96	3.27	1.43	1.69	3.35	1.75

Note: LA= Languaging group. DC= Direct correction group.
M= mean. TNS= total number of sentences.SD= standard deviation.

Figure 9 and Table 25 show that both the languaging group and the direct correction group

increased the number of correct verb forms from the pre-test to the post-test. However, neither group wrote many sentences, compared to those in the pilot studies. This result may be because the students used other expressions, such as modal verbs. In fact, some of the students used the auxiliary verb *can* to introduce what their family or friends are able to do, hence, the sentences which did not contain the third-person singular "-s" were excluded in the main study. The data were re-examined in a Wilcoxon signed-rank test. The result of the Wilcoxon signed-rank test also indicated a significant difference between the pre-test and the post-test in the languaging group and the direct correction group (see Table 26). The analysis by type count showed a similar tendency, but the languaging group seemed to improve its accuracy rate between the pre- and post-tests more than the direct correction group did. This result suggests that the students in the languaging group used a variety of verbs and used them more accurately than did the direct correction group. See Table 27 and Figure 10 below. (See Appendix D for details.)

Table 26
Difference between the pre- and post-writing tests in the main study

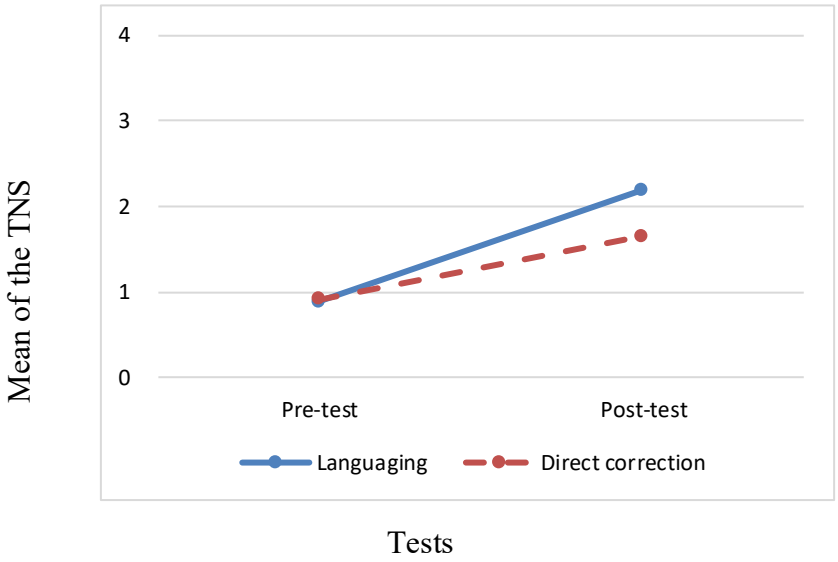
Group	Test Comparison
	pre-post
LA	.005* (.545)
DC	.008* (.518)

Note: Each effect size of index *r* is shown in parentheses.
*$p < .05$
Note: LA= Languaging group. DC= Direct correction group.

Table 27
Average number of correct verb form types in the pre- and post-writing tests in the main study

Group (N)	Pre-test			Post-test		
	M	TNS	SD	M	TNS	SD
LA (27)	0.89	3.67	1.52	2.19	3.56	1.68
DC (26)	0.92	3.12	1.41	1.65	3.27	1.69

Note: LA= Languaging group. DC= Direct correction group.
M= mean. TNS= total number of sentences. SD= standard deviation.



Note: Languaging= Languaging group. Direct correction= Direct correction group.

Figure 10. Mean distribution in the writing test in the main study (TNS range 0 to 5)

On the other hand, the results show both groups increased the number of correct verb forms, in spite of the different types of feedback, with no significant difference between the groups. Thus, an attempt was made to determine whether there were significant differences between the languaging group and the direct correction group. However, a Mann-Whitney U test showed no significant differences between the two on either the pre-test or the post-test (see

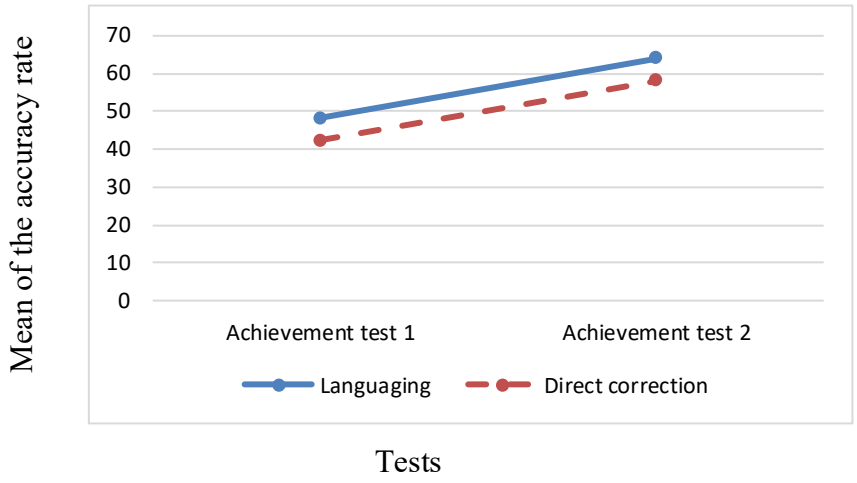
Table 28).

Table 28
Differences in the writing test between groups in the main study

Test Comparison	
pre	post
.673 (.058)	.281 (.149)

Note: The effect size of index *r* is shown in parentheses.

In addition, to investigate long-term effects, questions related to the target structure on achievement tests, which were administered after an interval of one month and eight months, were extracted (see Appendix F). The teacher did not allocate time for languaging after the research but did communicative activities and reading comprehension using the textbook. Figure 11 shows the results of the achievement tests.



Note: Languaging= Languaging group. Direct correction= Direct correction group.

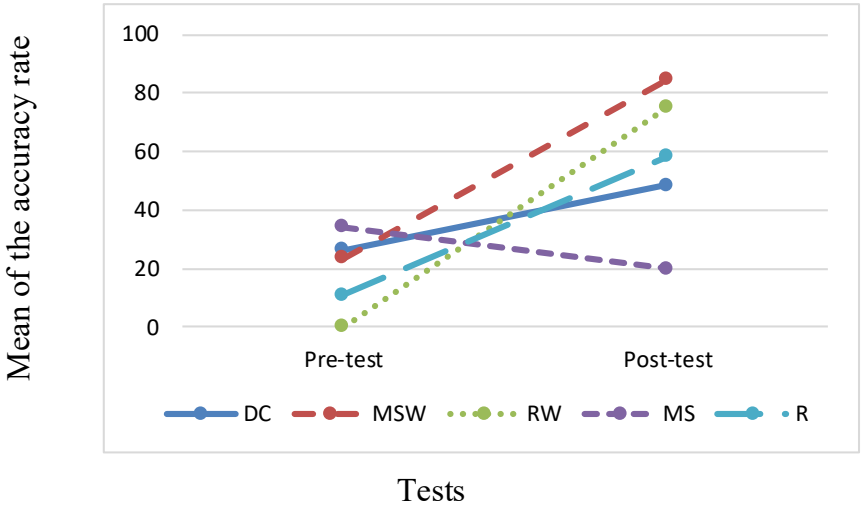
Figure 11. Changes in the accuracy rate in the achievement tests between the languaging group and the direct correction group

The mean accuracy rate of both groups slightly increased on the second achievement

test, which was administered eight months later. The languaging group and direct correction group followed the same pattern, and there was no significant difference between them.

Next, to examine research question (2), To what extent do different types of languaging have different effects in helping learners' achieve accuracy in the use of the third-person singular "-s", an analysis of the subclasses of the languaging group was carried out. As mentioned in 4.2.3, the languaging group was divided into six subsets: Students who corrected errors using both spoken and written metalinguistic explanations were classified in the MSW group, those who corrected errors using only spoken metalinguistic explanations were classified in the MS group, those who corrected errors using written metalinguistic explanations were classified in the MW group, those who could not correct errors by themselves but repeated their partners' correct utterances and took notes were classified in the RW group, those who repeated their partners' metalinguistic explanations but did not take notes were classified in the R group and those who only listened to their partners' utterances silently, who did not make any metalinguistic explanations or take any notes were classified in the Z group. As a result of this classification, 11 students fell into the MSW subset, 5 into MS, 3 into RW, 3 into R, and 3 into Z. There were no students who fell into the MW subset. The data related to two students in the MS subset were eliminated, as they were absent from the second achievement test. Three students in the Zero participation group were also eliminated, as they did not make use of any languaging. Figure 12 shows changes

in the mean percentage of correct verb forms among the groups.



Note: DC= Direct correction group. MSW= Spoken and written metalinguistic explanation group. RW= Repetition and writing group. MS= Spoken metalinguistic group. R= Repetition only group.

Figure 12. Changes in the accuracy rate in the writing test among the groups

Clearly, the MSW group improved its accuracy the most, followed by the RW group. Some of the students in the RW group who did not correct errors by themselves improved accuracy after repeating and writing their partners' metalinguistic explanations. In contrast, the students in the MS group who corrected errors by themselves, but did not take notes, did not improve accuracy immediately after the languaging exercises. Figures 13 and 14 show the changes in the percentage of correct answers among the students in the RW group and MS group. Individual students are represented by alphabetic initials in the figures.

Although none of the students in the RW groups could use the third-person singular

"-s" accurately in the pre-test, in the post test, all of them used the third-person singular "-s" in their writing: student U used the third-person singular "-s" in all the sentences correctly out of four, student V in three sentences out of four, and student X in one sentence out of two. Although the number of their sentences was limited, it seemed that they had learned the concept of the third-person singular "-s" to some extent.

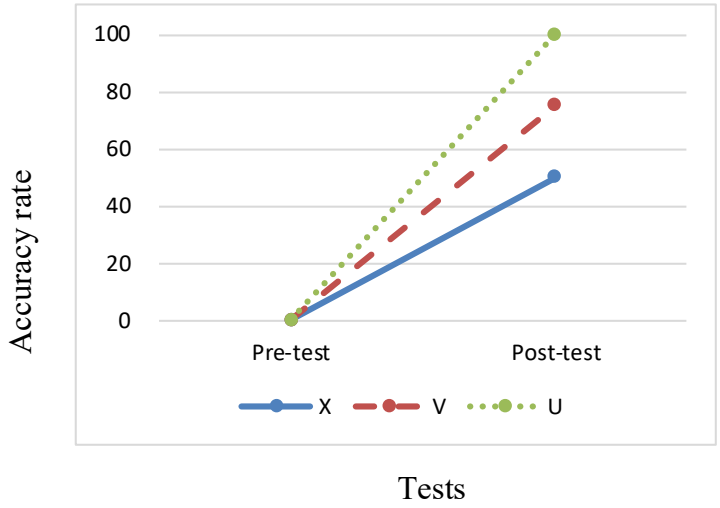


Figure 13. Changes in the accuracy rate of the RW group's students in the writing test

In comparison, although the students in the MS group initiated the languaging stage and were able to find out the reasons for their errors, three students, AE, H and A, could not use the third-person singular "-s" correctly in their writing in the pre- and post-tests. Although student K used the third-person singular "-s" in the pre- test, with four sentences correct out of six, she added the be-verb *is* before the general verbs in all the sentences in the post-test. Only student W used the third-person singular "-s" correctly in both the pre-

and post-tests.

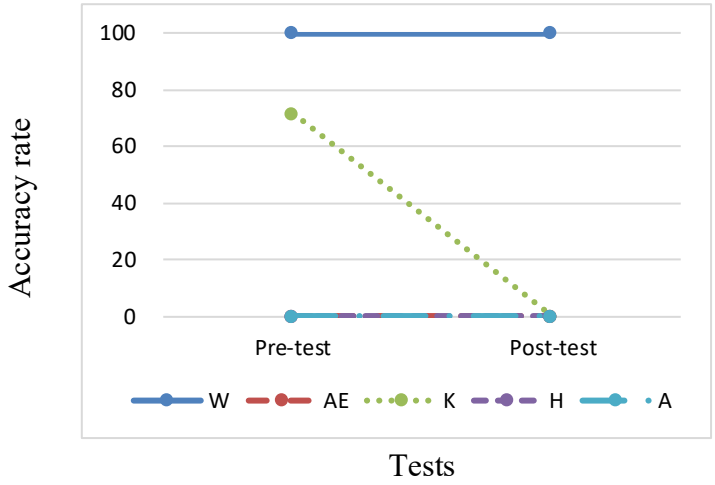


Figure 14. Changes in the accuracy rate of the MS group's students in the writing test

The students in the Repetition-only group also improved their accuracy, except for student Q (see Figure 15).

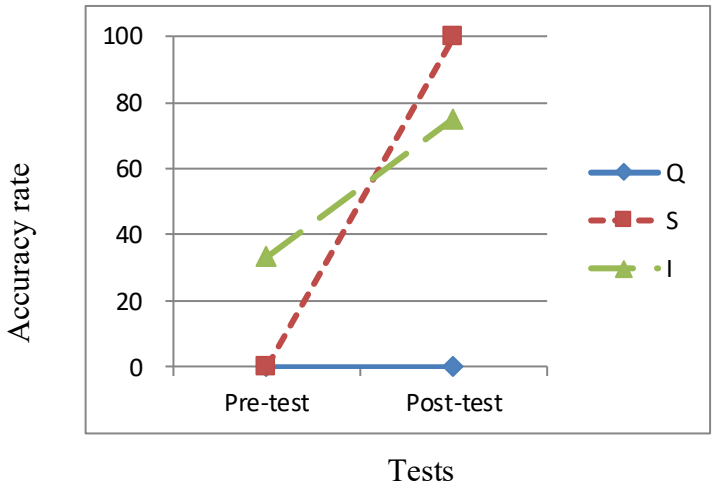


Figure 15. Changes in the accuracy rate of the R group's students in the writing test

Student S improved her accuracy in the post-test that was administered ten days after the languaging activity and used the third-person singular "-s" correctly in the achievement-

test that was administered eight months later. Student I also improved accuracy in the post-test. She only used the verb *likes* in the pre-test, but in the post-test, she used two different verbs, *lives* and *plays*, accurately. Student Q, however, did not improve in accuracy at all.

4. 3. 2 Results of the speaking test

Next, the results of the speaking test were examined. In the second pilot study, the positive effect of languaging was not confirmed, since there was no pre-test. That oversight was rectified in the main study. In the writing test, the data of 53 students were used, a higher number than in the speaking test, where some data were lost because some students were too shy to record their voice and others had trouble operating the recording machine. Therefore, data from only 21 students in the languaging group and 26 in the direct correction group could be used.

Judgements about the spoken data among the assistant English teacher, his son, and the researcher were in agreement 98.9% of the time: out of 294 total sentences which contained the third-person singular, only three sentences were in dispute. Among the 294 sentences, 14 words were unintelligible for the native speaking judges, but all of them were nouns which did not affect the results.

Table 29 shows the average number of correct verb forms used in the speaking test as a token count.

Table 29
Average number of correct verb form tokens in the pre- and post-speaking tests in the main study

Group (N)		Pre-test			Post-test		
		M	TNS	SD	M	TNS	SD
LA	(21)	0.95	3.24	1.13	1.86	3.67	1.12
DC	(25)	1.00	2.88	1.33	1.64	3.08	1.41

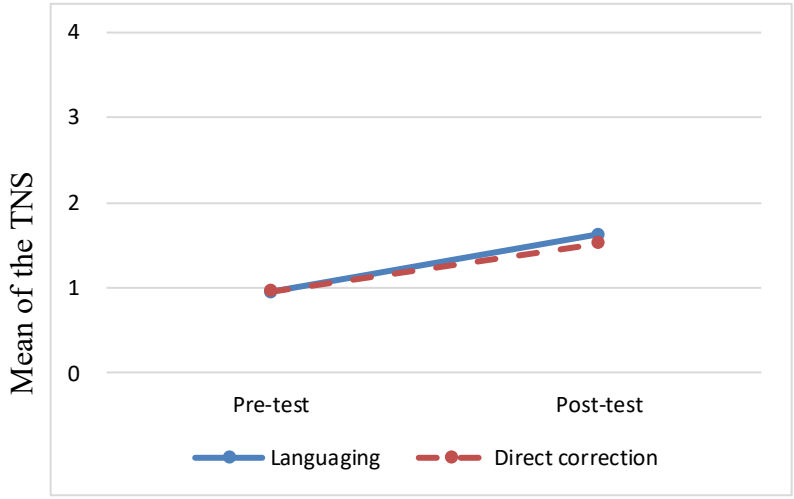
Note: LA= Languaging group. DC= Direct correction group.
M= mean. TNS= total number of sentences. SD= standard deviation.

Both groups increased the number of correct verb forms from the pre-test to the post-test. However, the languaging group produced more correct verb forms than the direct correction group did. On the other hand, the analysis in a type count shows the change in the accuracy rate of both groups to be the same (See Table 30 and Figure 16) (see Appendix E for details).

Table 30
Average number of correct verb form types in the pre- and post-speaking tests in the main study

Group (N)		Pre-test			Post-test		
		M	TNS	SD	M	TNS	SD
LA	(21)	0.95	3.00	1.13	1.62	3.24	1.13
DC	(25)	0.96	2.68	1.22	1.52	2.84	1.47

Note: LA= Languaging group. DC= Direct correction group.
M= mean. TNS= total number of sentences. SD= standard deviation.



Note: Languaging= Languaging group. Direct correction= Direct correction group.

Figure 16. Mean distribution in the speaking test in the main study (TNS range 0 to 4)

This result might suggest that although the students in the languaging group produced more correct verb forms than the students in the direct correction group, they used specific kinds of verbs repeatedly.

A Wilcoxon signed-rank test also indicated a significant difference between the pre-test and the post-test in both groups (see Table31), but a Mann-Whitney U test showed no significant difference between the two groups (see Table 32).

Table 31
Differences between the pre- and post-speaking tests in the main study

Group	Test Comparison
	pre-post
LA	.042*(.444)
DC	.019* (.417)

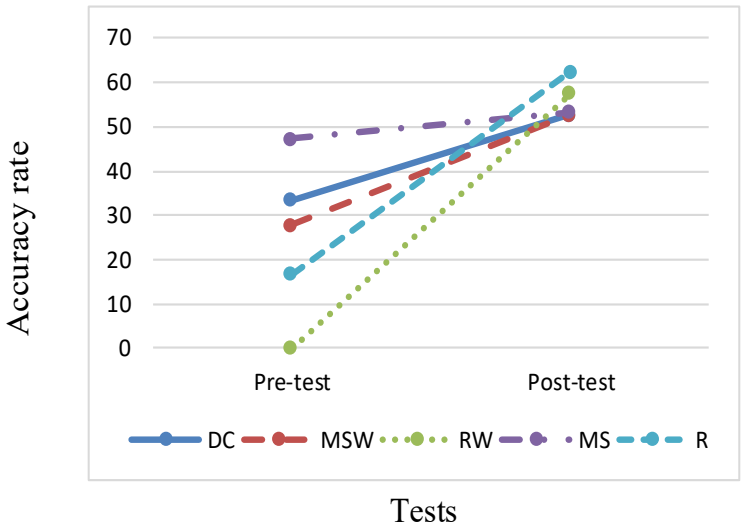
Note: Each effect size of index *r* is shown in parentheses.
*p< .05
Note: LA= Languaging group. DC= Direct correction group.

Table 32
Differences in the speaking test between groups in the main study

Test Comparison	
pre	post
.934 (.013)	.525(.094)

Note: The effect size of index *r* is shown in parentheses.

Next, the results among the subsets in the languaging group were examined. As on the writing test, all of the subset groups showed an improvement from the pre-test to the post-test (see Figure 17). However, in comparison with the result on the writing test, in which the MSW group improved its accuracy the most, the RW group showed the most improvement followed by the R group in the speaking test. On the contrary, the students in the MS and MSW group who initiated languaging and corrected errors by themselves did not improve in their accuracy so much. The DC group showed similar improvement as the MSW group.



Note: DC= Direct correction group. MSW= Spoken and written metalinguistic explanation group. RW= Repetition and writing group. MS= Spoken metalinguistic group. R= Repetition only group.

Figure 17. Changes in the accuracy rate in the speaking test among the languaging groups

It is also noteworthy that there is an apparent discrepancy in the results of the MS group, which produced more correct answers on the speaking test than on the writing test (see Figure 18). Perhaps the students in the MS group understood the target grammatical rule to a certain degree but not sufficiently to be able to use the form correctly in writing. Moreover, among the subset groups, the MS group was the only group whose accuracy rate on the writing test decreased in the post-test.

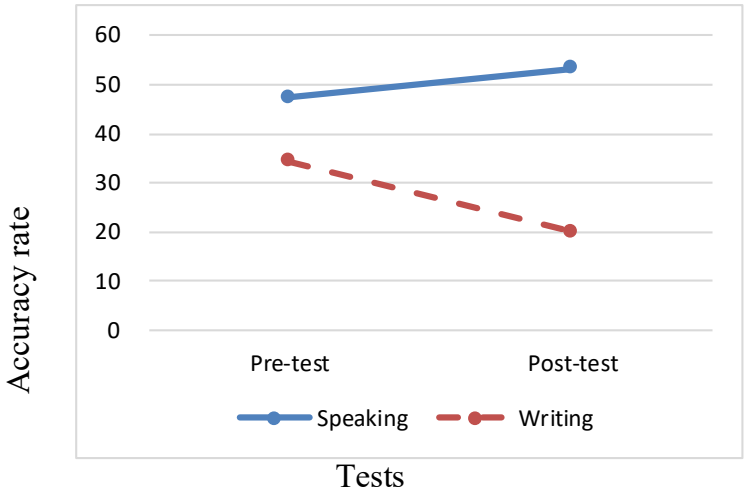


Figure 18. A comparison of the results of the MS group

Although the DC group also showed higher accuracy rate on the speaking test than on the writing test, the students' accuracy improved both in speaking and writing in contrast with the students in the MS group (see Figure 19).

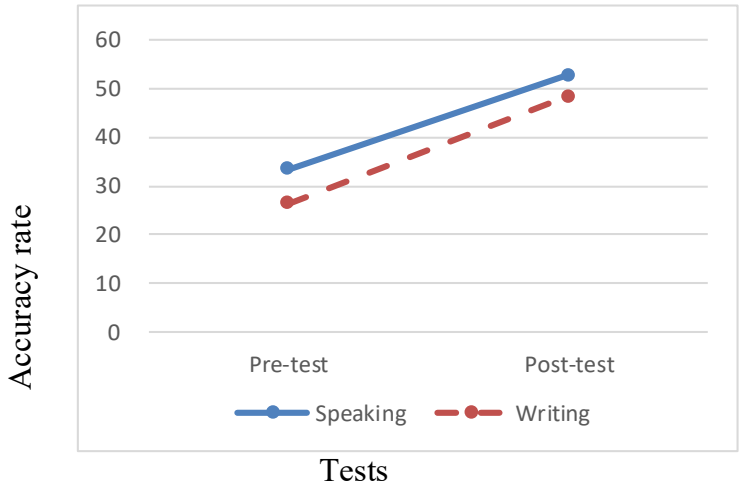


Figure 19. A comparison of the results of the DC group

The R group showed a similar tendency to the DC group in that the accuracy rate on the speaking test was higher than the writing test. However, both in speaking and writing, the improvement rate of its accuracy between the pre- and post-tests was more dramatic in the R group than the DC group (see Figure 20).

Figure 20. A comparison of the results of the R group

In contrast to the MS, DC and R groups, the MSW group and RW group improved their accuracy on the writing test more than on the speaking test. Another difference was that in the pretest, the writing and speaking test scores were almost the same for the MSW and RW groups (see Figures 21 and 22).

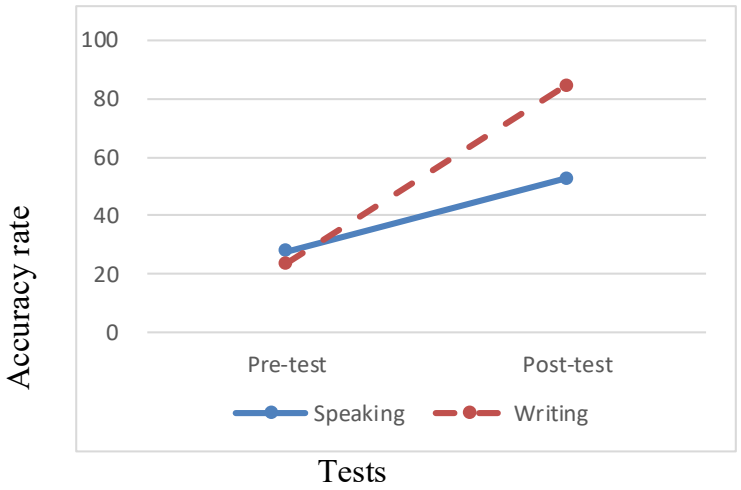


Figure 21. A comparison of the results of the MSW group

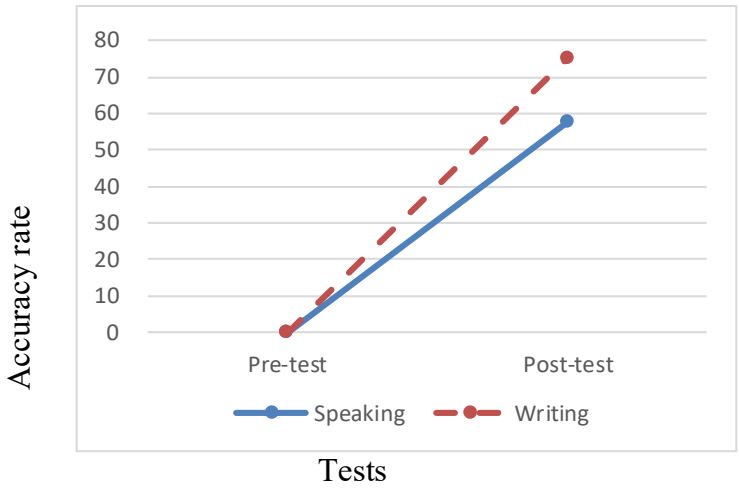


Figure 22. A comparison of the results of the RW group

The big difference between the MSW and RW group and the other groups was that the students of the MSW group and RW group took notes while languaging. This difference might have affected the results.

Among the subset groups, the most notable results were those of two students in the

RW group. Table 33 shows the changes in the utterances of students U and V in the RW group.

Table 33
Students U and V: speaking script

Student	Pre-test	Post-test
U	This is *Nonoka*. She is like *timpani* (tympanum). She play the *timpani* (tympanum) very well. She have man???	This is *Nonoka*. He likes *timpani* (tympanum). He play *timpani* (tympanum) very well. He likes comic books. He study music. She lives in ×××. She is mone? She have…She have *sutekki* (a stick).
V	This is *Nanami*. She is plays handball very well. She is practice handball every day. She is runs easily ???	This is my mother. She lives in Chino. She likes a book and cook. She cooks very well. She likes no? *kaeru* (frogs). She is good mother. I like her. Thank you.

In the pre-test, neither of them was able to use the third-person singular "-s" correctly, and they could not correct errors by themselves. However, in the post-test, they both increased the number of utterances, and they improved their grammatical accuracy, although they did not consistently use the target structure.

Other notable results were seen in those of students in the MS group. Figures 23 and 24 show the change in the percentage of correct answers of the individual students in the MS group on the writing and speaking tests.

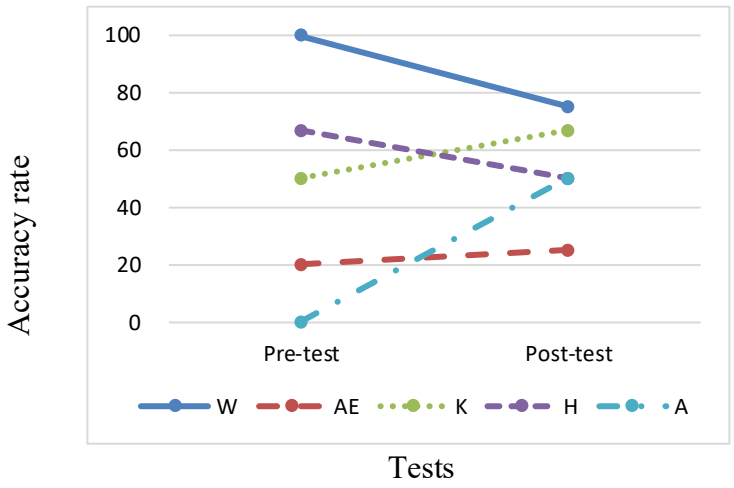


Figure 23. Changes in the accuracy rate of the MS group's students in the speaking test

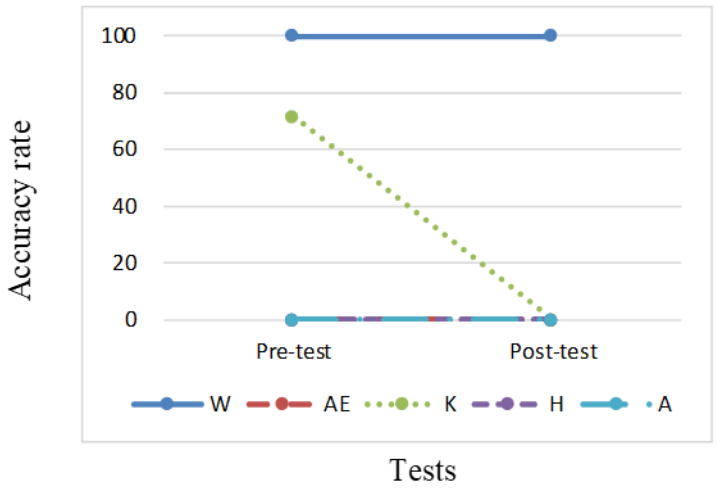


Figure 24. Changes in the accuracy rate of the MS group's students in the writing test

Surprisingly, students AE, H, and A, who produced correct utterances using the third-person singular "-s" in the speaking test, could not use that form accurately in writing in the pre- or post-tests. Furthermore, student K, who improved accuracy in speaking, could not

use the third-person singular "-s" correctly at all in the writing post-test. She added be-verbs before the general verbs in all the sentences in the writing post-test. Only student W consistently used the target grammar accurately from the beginning. Possible reasons why the students in the MS group produced more correct verb forms in speaking than in writing, whereas the students in the other groups improved their grammatical accuracy in writing as well are discussed in section 4.4.

4. 4 Discussion

4. 4. 1 Discussion about the writing test

The results show no significant differences in the pre- and post-tests between the languaging group and direct correction group. In addition, the results of the achievement tests do not show a significant difference between the two groups. These results may not be surprising, since previous research has shown that the kind of direct feedback given to the direct correction group would be effective in enhancing grammatical accuracy (see, e.g., Sheen 2007, Ellis et al. 2008, Bitchener 2008). In response to research question (1), the results showed that languaging might have at least the same positive effect as teachers' direct feedback. If this is the case, adopting languaging could make English classes more student-centered, leading the students to work on tasks more enthusiastically with the same effect as receiving direct correction from the teacher. Although some students seem to prefer

correcting errors by themselves, as noted in the studies of Roskams (1999) and Sultana (2009), many are willing to work on tasks cooperatively. The following comments indicate the benefits of dealing with error corrections in a group (see Appendix P for details). These comments were made by students who participated in this research. However, it should be noted that these comments were made about another group activity.

> It's fun to make sentences using the knowledge I learned. I want to be able to write considerable sentences.

> I was able to learn considerable amount of words while writing sentences. Also, I feel I have become better at writing sentences. Although I want to improve my speaking ability more, I am very satisfied.

> I thought it was hard to pay attention to the details of English expressions. However, by working on the tasks, we were able to cooperate with each other and found the solution. I felt a strong bond with my classmates.
> It was a lot of fun to construct sentences with my friends.

> It was cool to discuss in a group and say things like, "Why don't we change the sentence like this?" and "We need *a* here." At first, I could not fully understand the expression, but I became to be able to understand deeply while correcting the errors with my friends. I want to do it again since it was a lot of fun to exchange ideas with a friend.

This result suggests, first, that languaging can be an option in correcting errors for both teachers and learners, as it is a more learner-centered activity as well as a motivating activity.

The results of the subclasses of the languaging group were intriguing. The results show that the MSW group improved its accuracy the most, followed by the RW group. The students in the RW group who did not correct errors by themselves seemed to improve accuracy after repeating and writing their partners' metalinguistic explanations (See Table 34).

Table 34

Transcription of the RW group's written data

Student	Pre- test	Post-test
U	This is *Nonoka*. She play ティンパニー (tympanum) very well. She treasure friends. She like comic books. I need *Nonoka*. She with talking very much. I like *Nonoka*.	This is *Nonoka*. She is from Japan. She likes music. She plays ティンパニー (tympanum). She likes ティンパニー (tympanum) very well. She lives in ×××. She likes comic book. She studys very well. I like *Nonoka*.
V	This is *Nanami*. She is plays ハンドボール (handball) very well. She is lives in *Chino*. She is runs easily very much. She is practices ハンドボール(handball) almost everyday. She is class in sleepes, sometimes. She is best my friend.	This is my mother. She lives in *Chino*. She likes a book and cook. She cooks very well. She likes not カエル(frogs). She is good mother. I like her. Thank you.
X	This is *Riku*. He play 野球 (baseball). He practice 野球 (baseball) almost everday. He like 象さん (elephants). He want 象さん (elephants). He know アードス君 (*Ardos kun*).	This is Riku He want 象さん (elephants). He likes 象さん (elephants).

It seems that all three students in the RW group understood the concept of the third-person singular "-s," as they did not use a be-verb with the main verb and added "-s" to the main verb in the post-test. Although student V used the structure of negation for the third-person singular verbs incorrectly, as mentioned in 4.2.3, he might have been in the developmental stage of understanding the structure of negation. It is also noteworthy that students V and U in the RW group, who improved their accuracy after languaging, retained grammatical awareness and got correct answers on the achievement tests that were administered one month and eight months later (See Table 35).

Table 35
The results for the achievement tests of the students in the RW group

	Achievement tests		
Students	1	2	
		①	②
X	×	✔	×
V	✔	✔	✔
U	✔	✔	✔

Note: Achievement test 1was administered one month after the post-test.
Achievement test 2 was administered eight months after the post-test.

In contrast, the students in the MS group who corrected errors by themselves, but did not take notes, did not improve accuracy immediately after the languaging exercises (See Table 36).

Table 36

Transcription of the MS group's written data

Student	Pre- test	Post-test
A	This is *Wakana*. She live in *Chino*. Sh like クラリネット (clarinet). She practice クラリネット (clarinet) every day. She don't like tea. She use CD プレーヤー (player). She know ベートーベン (Beethoven).	This is *Ayaka*. She is my sister. She study everybay. She have スマートフォン (cell phone). She live in *Chino*. She need 学力 (learning ability).
H	This is my friend *takuro*. He live's in *chino*. He like sport very much. He can play baseball very well.	This is my friend *takuro*. He live in *Chino*. He can play baseball very well. He play baseball almost everyday. He don't like Japanise (Japanese).
K	This is *Huyu*. She lives in *Chino*. She likes vocaloid and anime. She listen to music every day. She practice a table tennis. She plays the piano very well. She doesn't speak English very well. She studies Japanese very well.	This is *Fuyu, N×××*. She is has a lot of VOCALOID CD. She is likes VOCALOID and anime. She is plays table tennis. She is lives in *Chino* city. She is treasure book. She is listen to music every day. She is has a iPod touch.
W	This is *Hayato*. He likes soccer. He practices soccer almost every day. He studies English. He doesn't play baseball.	This is *Hayato*. He likes soccer. He practices soccer almost everyday. He studies English. He doesn't play baseball.
AE	This in *natsumi*. She practice piano and バイオリン (violin) almost everyday. She like ボーカロイド (VOCALOID). She have ギター (guitar) and バイオリン (violon). She don't like PE.	This is *Natsumi*. She live in *Nagano*. She like ボーカロイド (VOCALOID). She practice piano and バイオリン (violon). She have a ギター (guitar). She don't like PE.

The students in the MS group took the initiative in discussions with their partners while correcting errors. Judging from this situation, they apparently understood the target

structure well. However, their accuracy did not improve immediately after languaging, except for student W, who obtained 100% accuracy in eleven sentences. The results of the RW group and MS group indicate that languaging may have a ripple effect on the accuracy of learners' expressions, and it might be more effective to use both "written and spoken languaging" than simply orally verbalizing metalinguistic explanations.

Figure 25 and Table 37 show the changes in the accuracy rate and the results of the writing test and on the achievement tests of the spoken and written metalinguistic explanation group.

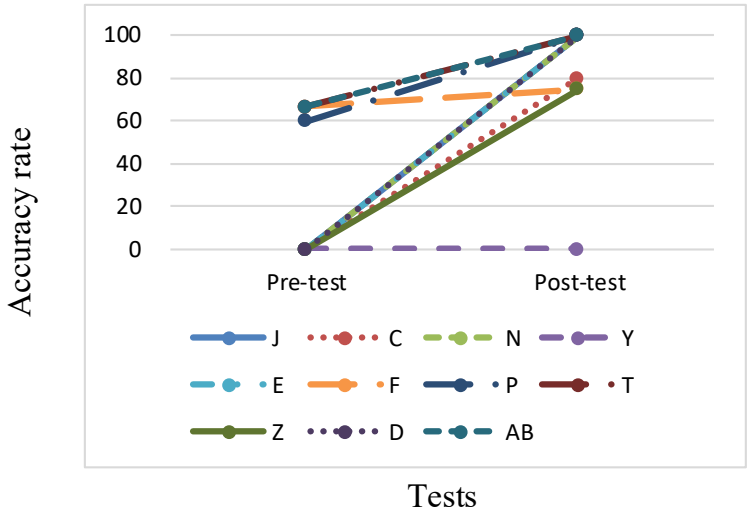


Figure 25. Changes in the accuracy rate of the MSW group's students in the writing test

Table 37
The results for the achievement tests of the MSW group's students

Students	Achievement tests 1	2 ①	2 ②
J	✔	×	×
C	✔	✔	✔
N	×	×	✔
Y	×	✔	✔
E	✔	✔	✔
F	×	✔	✔
P	✔	✔	✔
T	✔	✔	✔
Z	✔	✔	✔
D	✔	×	×
AB	✔	✔	×

Note: Achievement test 1was administered one month after the post-test.
Achievement test 2 was administered eight months after the post-test.

All the students in the MSW group improved their accuracy between the pre-test and the post-test, except for Y, who overused the be-verb *is* or the third-person singular "-s" (See Table 38).

Table 38
Transcription of the MSW group's written data

Student	Pre- test	Post-test
C	This is *Maiha*. She is like volle ball. She is very good player. She is live in ×××. She is like pezz. She is practice volle ball at ofter school.	This is *Yusuke*. He is my brother. He likes beasball. He practices beasball every day. He likes bog. He haves two bogs. He don't likes school. But he likes PE. He treasures family.

D	This is *kouki*. He know many *zatugaku* (knowledge in various matters). He play basketball. He practice basketball almost every day. He have dog. He live in *kodomi*.	N/A
E	This is アカリ (*Akari*). She live in *Chino*. She like frends. She like dog. She study English. She	This is *Akari*. Shi is studeing English now. Shi lives in *Chino*. She likes books. She has mane frends. She can cook cookies. She uses computer. She wants new pen.
F	This is マナミ (*Manami*) She lives in chino She faverit キャラクター (character) is キティ(Hello Kitty) She play ハンドボール (handball) every day She has two brothers We are friends	This is マナミ(*Manami*) She likes キティ(Hello Kitty) and ムーミン (Moomin) She plays ハンドボール (handball) every day She lives in *chino* We are friends She have two brothers.
J	This is *Keita*. he like sakka (soccer). he live in ×××. he have bouru. he play sakka (soccer) almost everyday. he don't play beisu bouru (baseball).	This is *Keita*. He likes soccer. He lives in *Thino*. He playes soccer almost everyday. He doesn't play tennis.
N	This is my mother. She live in *chono*. She treasure my family. She like *wagashi* (Japanese sweets). She don't like	This lis my mather. she lives in *chino*. she treasures my family. she likes *sushi* very much.
P	This is *Kurumi*. She lives in *Chino* city. She plays softball and she runs. She likes flute. She often to talk with me. She have many friends. I like her.	This is *Kurumi*. She plays softball. She likes it. She is in the softball team and Rikujou (track and field) team. She has many friends. Because she is very kind. I like her.
T	This is *Kouta*. He plays baseball. He lives in *Suwa*. He practices baseball every Sunday, Tuesday, Friday and Saturday. He study	This is *Atsunori*. He plays baseball very well. He lives in *Hokkaido*. He practices baseball every day. He stays the USA now.

	English. He goes to gym. He uses computer. He play basketball very well.	
Y	This is *Kanna*. She is my friend. I like *Kanna*. She can play handball. She is practice handball almost everyday. She can study English.	This is *Kanna*. She can studys English. She can plays ハンドボール(handball). She is practices almost everyday. I like *Kanna*.
Z	This is my mother. She live in *Nagano*. She isn't like beef and chicken curry. She like listen to the music.	This is my Mather. She lives in *Nagano*. She likes misic. She is listen to misic every day. She doesn't like sttake and beef cury. She likes soping.
AB	This is *Nanami*. She is my friend. She plays ハンドボール (handball). She is good ハンドボール(handball) player. She has many friends. She enjoy life very much.	This is Nanami. She lives in Chino. She plays ハンドボール (handball). She is a good ハンドボール (handball) player. She practices ハンドボール (handball). She enjoys ハンドボール (handball) . She has many friends.

To investigate the reason student Y did not improve her grammatical accuracy in the use of the third-person singular "-s," Y's responses in the post-test were examined:

This is *Kanna*.
She can studys[?] English.
She can plays[?] ハンドボール (handball).
She is practices almost everyday.
I like *Kanna*.

The question marks here are her own. Therefore, she might have been confused at the time. Here we see the languaging of student Y and her partner, X.

X：I cannot understand why the expression *He play* is not ok. Teacher, neither of us can correct the errors.

Researcher：You need something when the subject is *he* or *she*…

X：“-s?”

Y：Right, “-s.”

X：We need “-s” for all of these sentences.

(The researcher left them to figure out this problem on their own.)

Y：This sentence also needs “-s.”

X：When the subject is a singular… I don’t know the reason, but… teacher, I cannot find the reason.

Y：You are good at pronouncing *teacher*.

X：Teacher, teacher, we cannot find the reason.

(The researcher did not notice their call.)

Y：We call it the third-person singular “-s,” don’t we?

X：I don’t know.

Y：Maybe, it’s ok. The third-person singular.

X：The third-person singular, the third-person singular “-s” ? *He like*… what do we need here? A comma?

Y：A comma? Maybe “-s” for all of these. None of these sentences has the third-person singular “-s.”

Judging from this languaging, student Y did not fully understand the rule regarding the third-person singular “-s” but remembered its metalinguistic explanation. Her partner, student X, did not understand the rule either. Hence, student Y might have got confused about the rule, using the general verb with the be-verb and adding the third-person singular “-s” when she used the auxiliary verb *can*.

Many empirical studies of both L1 and L2 acquisition suggest that learning a language does not follow a linear process, but rather a "U-shaped behavior" pattern, in which learners tend to overgeneralize certain forms in their output at an early stage, and eventually become able to use the target grammar correctly (see, e.g., Rumelhart and McClelland, 1986, 1987, Bardovi-Harlig 2000, Ellis 2003). In the case of the irregular past tense, at first, learners may use the correct form, but when they learn the standard form, they temporarily tend to use the irregular form incorrectly (e.g., *went- goed- went*). If this is the case, student Y might have been on the way to integrating the correct form. At least she added the third-person singular "-s" to the subject of the third person. This result indicates that she had started to understand the concept of the third-person singular "-s." In fact, in the achievement test, which was administered eight months later, she was able to use the third-person singular "-s" correctly. This result likely suggests that a certain length of time is required to accurately proceduralize the explicit rule of the third-person singular "-s."

Student Y did not go to a cram school. Hence, there is a possibility that after this research, she paid careful attention to the grammatical instruction she received or examined the rules by herself about the usages she was not sure of. Without the feedback of languaging, she might not have paid attention to the use of the third-person singular "-s." From the perspective of a cognitive scientist, Imai (2020) states that even if teachers provide clear lessons, if they do not meet the needs of their students, or if the information is not regarded

as important for them, there is a possibility that the learners will not notice it. After languaging, student Y might have had questions about the use of the third-person singular "-s" and that helped her learn the correct usage. If so, it could be said that languaging can play an important role in improving learners' explicit knowledge of grammar by facilitating noticing, even if they are not able to use the correct form right away. Student X, her partner, was able to use the third-person singular "-s" in the post-test and in the second achievement test eight months later. However, there were only four obligatory contexts for the third-person singular "-s" in the post-test and the second achievement test. Therefore, it is difficult to conclude that these results are the effect of languaging.

On the other hand, student C in the MSW group, who made the same errors as student Y, used the be-verb *is* with the general verb and improved grammatical accuracy in the post-test. Here is the languaging of student C's group.

> A：I didn't add "-s" after the verb. I made a spelling error. I didn't add *a* (before a countable noun).
> B：My error is a word choice, I should write here *grandfather*, not *old man*. I don't need an apostrophe here, *He like's*. Also I made a spelling error on the word *fish*.
> C：I forgot the third-person singular "-s." The spelling of *volleyball* and *after* are wrong. I added an unnecessary *at* before the words *after school*.

Student V, in the RW group, who made the same error as student Y, improved

grammatical accuracy after languaging and retained this accuracy in the achievement tests one month and eight months later, even though she could not correct the errors by herself during languaging. Here is the languaging of student V and her partner, W:

V：Why? Why don't I need *is* here? Why?
W：This word needs a third-person singular "-s." When the subject is *he*, *she*…
V：And someone's name?
W：Yes, someone's name. So we add "-s" after the verb. You don't need a be-verb here.
V：I see. I don't need *is* here, right?
W：Right.

After languaging, V took note of what she learned from W: "There is a third-person singular '-s.' So I don't need a be-verb. That consists of the subject + verb + s. So I don't need a be-verb." V did not go to a cram school. Therefore, it is unlikely that she had any other intensive input outside of class about the target grammar between the languaging stage and the post-test.

There are two big differences between the languaging of student Y and the other two students, C and V, who successfully used the third-person singular "-s" in the post-test. First, the partners of students C and V were able to correct grammatical errors by themselves using metalinguistic explanations. Second, students C and V had opportunities to notice their wrong usage of the be-verb *is* while they were examining their errors. Student C's group did

not discuss these issues well with each other, but neither of C's partners used the be-verb *is* with the general verbs in their writing, unlike C. Therefore, it seems likely that C was able to visually notice the errors in her writing. In the case of student V, her partner W pointed out her mistakes with the be-verb *is* and corrected the errors directly. These findings suggest that learners tend to use the be-verb *is* and general verbs with the third-person singular "-s" at the same time, and for such learners, it might be necessary to have them focus on verbs, not the subject, and to compare the differences between the be-verb *is* and general verbs.

Judging from the results of the R group, simple repetition might not be as effective as other verbalizations in improving grammatical accuracy. To examine the effect, additional investigation, including a retrospective interview with Q, should have been carried out to determine whether or not he repeated his partner's utterances without understanding the rule. Another student, I, was able to use the third-person singular "-s" in the post-test, but the change in her accuracy seemed to be the same as S's, who improved accuracy temporarily in the post-test but failed to follow through in the achievement tests. This result suggests that learners make errors with the third-person singular "-s" if they do not pay attention (See Table 39).

Table 39
The results for the achievement tests of the R group's students

Students	Achievement tests 1	2 ①	2 ②
Q	×	×	×
S	×	×	✔
I	×	×	✔

Note: Achievement test 1was administered one month after the post-test.
Achievement test 2 was administered eight months after the post-test.

Results on the writing test show the possibility that languaging may have a ripple effect, since the students who could not solve the linguistic problems by themselves but repeated and wrote their partners' metalinguistic explanations improved their grammatical accuracy on subsequent occasions. Nevertheless, there were some defects in the analysis. First, it would have been more reliable to distinguish answers which used the third-person singular "-s" correctly and those which used "-s" but involved other mistakes in spelling or form (e.g., *haves, studys, plactices*), and still others which used "-s" with be-verbs or auxiliary verbs (e.g., *is plays, can uses*). Instead of the point system used in this study; that is, 1 point for verb forms which used the third-person singular "-s" regardless of containing spelling or other form-related mistakes, and 0 point for verb forms which did not use the third-person singular "-s," or one which used the third-person singular "-s" with be-verbs or auxiliary verbs at the same time, a point system such as the following might have yielded more elaborate results that are suggestive of the learners' developmental stages: 3 points for

the correct verb form, 2 points for verb forms which contain spelling or other form-related mistakes, 1 point for verb forms which used the third-person singular "-s" with be-verbs or auxiliary verbs at the same time, and 0 point for verb forms with no "-s." With such a system, the writing of student U in the RW group and of student C in the MSW group would be 17 points in a token count and 11 points in a type count, which were 6 points and 4 points, respectively, in the main study.

The following is a writing sample of student U in the RW group, scored according to the two point systems: the scores in the square brackets indicate the score based on the revised point system vs. that based on the original point system

(1) This is *Nonoka*. She is from Japan.

(2) She likes music. [3 points/1 point]

(3) She plays ティンパニー (tympanum). [3 points/1 point]

(4) She likes ティンパニー (tympanum) very well. [3 points/1 point]

(5) She lives in ×××. [3 points/1 point]

(6) She likes comic book. [3 points/1 point]

(7) She studys very well. [2 points/1 point]

(8) I like *Nonoka*.

The writing of student C in the MSW group:

(1) This is *Yusuke*.

(2) He is my brother.

(3) He likes beasball. [3 points/1 point]

(4) He practices beasball every day. [3 points/1point]

(5) He likes bog. [3 points/1 point]

(6) He haves two bogs. [2 points/1 point]

(7) He don't likes school. [1 point/0 point]

(8) But he likes PE. [3 points/1 point]

(9 He treasures family. [3 points/1point]

If the revised point system were adopted, the students who are able to use the third-person singular "-s" correctly and those who are still in the developmental stages in acquiring the third-person singular "-s" would be distinguished more clearly. Then, it may be possible to investigate how students develop their understanding of the third-person singular "-s" and what developmental stages the students are in.

Another possible limitation in the analysis for the current study is that although few students used negations in the main study, which may thus not have affected the result, negative structures should have been analyzed separately. As mentioned in 4.2.3, it takes time for learners to acquire English negations, and it requires a higher level of understanding of the syntactic structure. Empirical research shows no matter which language background learners have, they follow a similar sequence of acquisition of English negations: (1) no + V,

(2) don't + V, (3) auxiliary + not (e.g., *can't* and *won't*), (4) different forms of the auxiliary do with both *n't* and *not* (e.g., *does not* and *did not*) (Ellis and Barkhuizen 2005). Hence, negations should not have been treated as the same type of error as verb forms which had no "-s" with the main verb. Although student C in the MSW group used the third-person singular "-s" of the interrogative form correctly, she was still in the second stage of the sequence of acquisition of the negative form (see (7) above).

4. 4. 2 Discussion about the speaking test

The results of the speaking test replicated those of the writing test; both groups improved accuracy, regardless of differences in feedback. In other words, languaging may be as effective as a teacher's direct feedback.

However, there was one point that was different from the result of the writing test: the students in the MS group produced more correct verb forms in speaking than in writing. It is not surprising that the other groups produced more correct verb forms in writing than in speaking, since writing allows for more time to monitor and correct one's performance, compared to speaking, which is more spontaneous and usually does not allow for much monitoring. To examine this result in more detail, the data were transcribed (see Appendices J and K for details) to compare the verbs that the students used in the writing and speaking tests, respectively. Table 40 shows the results of this investigation.

Table 40
Number of verb types used by students in the MS group

Items	Writing		Speaking	
	Pre-test	Post-test	Pre-test	Post-test
have	1	4	4	2
know	1	0	0	0
like	5	3	4	4
listen	1	1	0	0
live	3	4	3	4
need	0	1	0	0
play	1	2	4	2
practice	4	2	4	3
study	2	2	1	1
treasure	0	1	0	1
use	1	0	0	0
Total number	19	20	20	17

As shown here, the students used a more limited number of verbs in the speaking test. In addition, the verbs that the students used most frequently seemed to be the ones that they were familiar with: *have, like, live, play* and *practice*. Tables 41 and 42 show the top fifty verbs that appeared in the textbook and the listening text of *New Crown 1* (2012). Their occurrence was counted from Lesson 1 to Lesson 8, which students had studied before the pre-test. This analysis was done with respect to the total number of tokens in the text and shown in decreasing order. Since these verbs were frequently used in the textbook and communicative activities, the students might have memorized third-person singular usages, and thus tended to use them correctly. This result is consistent with the empirical studies

which show that the frequency of occurrence of the target language has a positive effect for learners. Ellis (2002) insists that frequency is a key component in acquisition, because linguistic rules have structural regularities, and learners analyze these characteristics through language input. Therefore, the more input learners have, the more opportunities they have to understand the characteristics of the target language, whether or not this acquisition is intentional.

Table 41

The fifty most frequent verbs in the textbook

Rank	Verbs	N
1	**play**	**77**
2	do	41
3	**like**	**35**
4	**have**	**33**
5	does	19
6	**study**	**13**
7	don't	12
8	eat	11
9	get	11
10	go	9
11	**live**	**8**
12	use	8
13	speak	7
14	come	6
15	know	6
16	run	6
17	take	6

Rank	Verbs	N
18	look	5
19	see	5
20	swim	5
21	touch	5
22	write	5
23	climb	4
24	cook	4
25	meet	4
26	call	3
27	doesn't	3
28	excuse	3
29	help	3
30	hold	3
31	push	3
32	talk	3
33	choose	2
34	clean	2

Rank	Verbs	N
35	listen	2
36	move	2
37	practice	2
38	read	2
39	say	2
40	shoot	2
41	sing	2
42	thank	2
43	watch	2
44	ask	1
45	buy	1
46	bring	1
47	carry	1
48	catch	1
49	draw	1
50	drink	1

Table 42

The fifty most frequent verbs in the listening text

Rank	Verbs	N
1	do	64
2	**play**	**63**
3	**like**	**52**
4	**have**	**47**
5	does	26
6	don't	12
7	see	12
8	use	12
9	doesn't	11
10	know	8
11	**practice**	**8**
12	meet	6
13	start	6
14	come	5
15	cook	5
16	run	5
17	eat	4

Rank	Verbs	N
18	go	4
19	swim	4
20	excuse	3
21	get	3
22	study	3
23	touch	3
24	climb	2
25	fly	2
26	hear	2
27	help	2
28	leave	2
29	live	2
30	make	2
31	teach	2
32	wash	2
33	watch	2
34	write	2

Rank	Verbs	N
35	call	1
36	cut	1
37	draw	1
38	jump	1
39	look	1
40	paint	1
41	read	1
42	remember	1
43	ring	1
44	say	1
45	speak	1
46	talk	1
47	take	1
48	tell	1
49	thank	1
50	try	1

The second reason the MS group showed a decreased accuracy rate in writing might have been the negative effect of the score of one student, K. Since the sample size of this research was very small, even one bad score could affect the overall result. Therefore, it is necessary to investigate qualitatively the reason the accuracy of K's use of the third-person singular "-s" decreased. Tables 43 and 44 show K's output. In speaking, she produced more accurate sentences in the post-test, whereas she overused *is* in the post-writing test. The output of the other students is presented in Appendices H to O.

Table 43
Student K's speaking script

Pre-test	Post-test
This is *Fuyu*. She live in *Chino*. She likes bokaroido and anime. She practice a table tennis. She haves a bokaroido CD. She doesn't study English. She play the piano very well.	This is *Fuyu*. She lives in *Chino*. She likes Bokaroido and Anime. She is treasure book. She plays table tennis. She practice table tennis. She has a lot Poplerushiri.

Table 44
Student K's writing script

Pre-test	Post-test
This is *Huyu*. She lives in *Chino*. She likes vocaloid and anime. She listen to music every day. She practice a table tennis. She plays the piano very well. She doesn't speak English very well. She studies Japanese very well.	This is *Fuyu, N*×××. She is has a lot of VOCALOID CD. She is likes VOCALOID and anime. She is plays table tennis. She is lives in *Chino* city. She is treasure book. She is listen to music every day. She is has a iPod touch.

One reason that she overused *is* might have been due to the type of correction used in the languaging stage. In the pre-test, she only made two errors: “She listen to music every day.” And “She practice a table tennis.” She corrected these errors by herself, saying, “When the subject is the third-person singular, I need ‘-s,’ for example, *lives* and *likes*.” However, when she corrected the word *practice*, she added *is* and came up with **practicies.* This result might have occurred because of the pronunciation [prǽktəsəz]. This *is* sound might have interfered with her correct explicit knowledge in writing and caused the misuse of the verb. She might have remembered the word *practices* as having a connective sound, so she achieved proceduralization for this verb through extensive practice, but not with the other verbs. Another possibility is that when learners are still in the developmental stage, internalizing the use of the third-person singular “-s,” they do not think deeply and add “-s” in speaking, but in writing, when they have time to review, they analyze deeply and may add an unnecessary be-verb. In fact, the students in the main study tended to add be-verbs to the main verb consistently. If this is the case, there is a possibility that the review time involved in writing had a negative effect. In comparison, as mentioned in the results section, student V, who examined the usage of the be-verb *is* and the third-person singular “-s,” improved accuracy in both the writing and speaking tests after languaging. However, the number of samples is too limited to state a definite interpretation. Further research involving more samples would be necessary to clarify the reason for the present findings.

5. Conclusion

5. 1 Summary

This research has focused on verifying whether spoken and written modes of languaging are effective in helping Japanese junior high school students to improve grammatical accuracy in writing and speaking, especially in terms of their use of the third-person singular "-s." In the current research, languaging was specifically operationalized as "pair-explanation activities in which learners solve linguistic problems with the use of both oral and written forms."

The research was carried out to find effective ways to help students learn the third-person singular "-s," a grammatical morpheme which is universally learned late by learners of English, despite its ubiquity. The focus was to use classroom activities that students could get involved in and that would help them increase their long-term grammatical retention. Languaging was found to be a solution to a long-standing problem of teachers spending considerable time in one-way instruction on grammar, ending up with students losing motivation to write.

To recap the research in brief, the first pilot study examined whether languaging was effective in helping young learners improve their accuracy in the use of verb forms, including the third-person singular "-s," in writing. The results showed a possibility that languaging can promote the retention of learners' explicit knowledge of grammar. The grammatical

accuracy of the experimental group improved between the immediate post-test and the delayed post-test, whereas the control group showed no significant differences between the two tests. However, the research design needed to be modified in terms of (1) the topic of the task, (2) the treatment of the control group, (3) the timing of the tests and (4) the methods of feedback. In addition, the high standard deviation of the experimental group on the post-tests indicated that certain types of languaging might be more effective than the others. Taking the results into consideration, in the second pilot study, one more research question was added, namely, whether different types of languaging have different effects on helping learners improve their accuracy in the use of the third-person singular "-s." Furthermore, the effects of languaging on speaking were examined as well as on writing. In addition, an eight-day interval was used to examine the delayed effects of languaging. The results showed that the students who used metalinguistic analysis in languaging produced more correct verb forms than those who did not. In addition, languaging was effective in improving grammatical accuracy in writing, not only for those who verbalized metalinguistic analyses, but also for those who listened to their partners' output. The second pilot study, however, required some modifications: first, although the students practiced metalinguistic explanations in class, some students could not fully understand the rule of the third-person singular "-s," and second, it was necessary to allow for a longer interval between the practice of metalinguistic explanations and the pre-test, and between the languaging treatment and

the post-test.

On top of that, these pilot studies were introduced right before a term exam. Therefore, other factors, such as self-study at home or practice tests for the term exam, might have affected the results. It was, thus, necessary to carry out research under conditions in which the students had fully understood the grammatical rules of the target structure and in which they were not affected by a term exam. Moreover, a pre-test had not been designed to examine the effects on speaking in the second pilot study. This defect made it difficult to conclude whether languaging could be effective in improving grammatical accuracy in speaking. Lastly, to examine long-term effects, an eight-day interval was deemed too short.

The main study was based on the two pilot studies, taking the abovementioned shortcomings into consideration. In the main research, the languaging group improved grammatical accuracy as much as the direct correction group did, in both writing and speaking performance. The result implied that languaging in pairs is as effective as teacher's corrections. Moreover, both the students who corrected errors using metalinguistic analysis and those who listened to their partner's languaging and took notes improved grammatical accuracy in the subsequent writing tests, and they were able to use the target grammar accurately in the achievement test that they took eight months later. In short, the results in the pilot tests and the main study together suggest that languaging has a positive effect in improving learners' grammatical accuracy.

Another finding is that students tend to use the be-verb *is* and general verbs at the same time and overgeneralize in the use of be-verb *is* (e.g., *is practices, is likes*), but in pairs where languaging involved the discussion of the difference between the copula and the general verbs, students were successful in eliminating the overgeneralized error. Such languaging led to further improvement in their accuracy on subsequent occasions, and implies the possibility of languaging becoming a scaffolding opportunity among peers (see 4.4.1 for details).

Another notable finding in the main study is that four developmental stages in acquiring the third-person singular "-s" were seen in the students' output. In stage one, the students omitted the third-person singular "-s" (e.g., *She study, She like*). In stage two, the students tended to overuse the be-verb *is* with general verbs or the third-person singular "-s," adding "-s" to sentences which included auxiliary verbs (e.g., *is likes, can plays*). In stage three, the students used the third-person singular "-s" with main verbs on obligatory occasions, but there were spelling mistakes or morphemic inaccuracies (e.g., *studys, haves*). Finally, in stage four, the students used the third-person singular "-s" correctly. If negation and interrogative structures had been added, additional developmental stages would have been observed. Further investigation is needed to elucidate whether learners with different profiles would follow the same developmental stages in acquiring the third-person singular "-s" and to examine the developmental stages of verb forms in relation to other grammatical

morphemes and syntactic structures.

5. 2 Educational implications

Despite the small-scale nature of this study, the implications of the findings have a potential impact on language education. First, using oral and written languaging concurrently seems to be effective in improving grammatical accuracy. This implication became apparent because the students in the RW group, who could not correct errors by themselves but repeated their partners' utterances and took notes, improved grammatical accuracy and retained it for a long time. The result suggests that languaging can have a ripple effect on the accuracy of learners' output, as the second pilot study showed. This effect was reinforced when learners took notes. The finding suggests not only the effectiveness of collaborative learning but also a positive effect of pair work. According to National Training Laboratories, which examined "average learning retention rates," if learners are involved in activities and collaborate with others, their retention rates increase dramatically (Rikkyo Univ. 2015). This phenomenon is illustrated in Figure 26. We can see that students only remember about 5% of what they listen to in lectures, and 10% by reading textbooks, but retain about 90% of what they learn through teaching others.

Source: National Training Laboratories, Bethel, Maine (see Rikkyo Univ. 2015)

Figure 26. Learning Pyramid

Second, languaging may have at least the same effect as direct corrections by teachers. Although explicit error correction by teachers is claimed to be effective, in this study, the results of the languaging group and the direct correction group showed no significant differences from the effect of direct corrections by teachers. This result indicates that languaging can be a better way of correcting errors, because it can avoid one-way "grammar instruction" by teachers and endorse a more learner-centered "collaborative form of grammar learning" by learners, which has the potential of better retention in the long run due to deeper involvement as well as higher motivation. Clearly, languaging is effective in helping learners correct their own grammatical errors in context.

Third, there is a possibility that languaging may deepen learners' understanding of the use of the third-person singular "-s," a form that usually takes a long time to acquire.

Although it is difficult to say that all declarative knowledge can serve learners' language acquisition, languaging can offer a good opportunity for learners to confirm their grammatical knowledge, or lack of it, and this step could lead to deeper understanding. Furthermore, those who have acknowledged the effectiveness of languaging might be able to make use of the approach at home as well, enhancing their autonomy.

From these findings, some suggestions for Japanese English classes can be made. First, well-balanced teaching is essential: there should not be a focus on forms or meaning alone but on focus on form; that is, attention to form in communicative context, with meaning and use in mind. There should also be a balance between teacher instruction and learner-initiated class activities. Based on this idea, it is important to give students opportunities to reflect on their utterances and think by themselves. The Japanese government-prescribed the Courses of Study for lower secondary schools, enforced in 2017, emphasizes the importance of teaching English in meaningful contexts and giving learners opportunities to express their feelings, ideas and thoughts in language activities. Learners should be encouraged to engage in real conversations, not just copy model dialogues. It also seems crucial that they are given an opportunity to reflect on their utterances and examine the expressions that they could not use properly after a conversation. As many researchers point out, in a foreign language learning environment such as Japan, where learners cannot expect a large amount of natural input, classroom instruction with an explicit focus on grammar plays an essential role in

developing students' L2 proficiency. Although MEXT (2017) claims that it is important to encourage students to first speak or write freely, using the words and set phrases they have learned without being overly concerned with accuracy, teachers still need to give advice on accurate and appropriate use of language. They can do this by having students examine expressions by themselves through languaging. As of 2021, each learner is scheduled to be able to study using a tablet terminal at school. In this way, learners can record their conversations using the tablet and check their output while discussing in pairs. They can then try revised expressions on subsequent occasions, enabling them to become more aware of their own English learning process.

Second, when teachers give feedback in writing, they should not correct all the errors, but instead, underline errors in a target structure and have learners think about the problems by themselves. This treatment can foster self-reliance. If teachers correct all the errors that learners make or push them to pay attention to forms only, it will deprive them of the opportunity to think by themselves, and they will be unwilling to write their ideas or thoughts in English because of the fear of making mistakes. As BERD (2014) showed, one of the reasons that students feel difficulty in writing has to do with grammar. As was mentioned in the first chapter, this tendency can be seen in the results of the national assessment of academic ability in English for students in the third year of lower secondary school administered in 2019. In the writing test, students had to organize and put down their

thoughts about a given theme while paying attention to the connections between sentences. The rate of correct answers was only 1.9% (see Appendices Q and R for details). Although approximately 50% of the students were able to write sentences of 25 words or more, they could not get the correct answer because of grammatical errors. To improve this situation, teachers must do two things: (1) Give students opportunities to write cohesive texts, and (2) Have students examine their writing with each other. The best way for learners to know whether or not their writing is intelligible to others is to have them read their compositions to each other and to encourage them to discuss the grammatical points they are not sure of in context. By doing so, they will focus more carefully on their writing and notice gaps between what they wrote and what they had wanted to write.

Third, pair work is a useful form of student activity in lessons. As mentioned previously, languaging might have a ripple effect, that is, even if a learner cannot correct his/her errors alone, the partner may be able to help find solutions and offer explanations. This collaborative learning style can benefit both learners. The findings from the current research also suggest that it would be preferable to avoid pairing slow learners to maximize the effect of languaging.

Yet another suggestion can be made in terms of material development. Currently, six different government-approved English textbooks are used in Japanese junior high schools, and each has a page which explains the rules related to a new point of grammar. On that page,

the explanations of the rules are designed to be easy for students to understand. However, to give students opportunities to think and analyze by themselves, some ingenuity may be required. Only two textbooks, "*NEW CROWN* (2020)" and "*Here We Go!* (2020)" have sections which enable students to examine the grammar point by themselves and increase their awareness through rule comparison and discovery learning (see Figure 27).

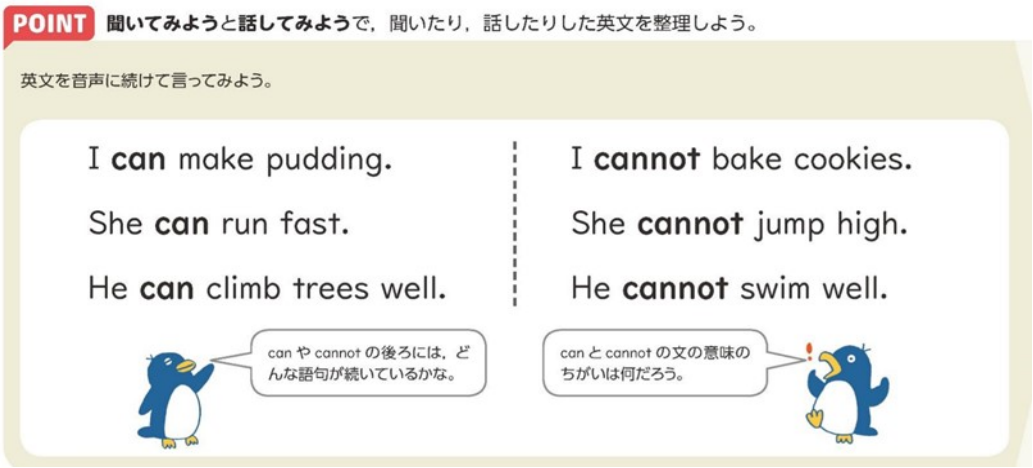


Figure 27. Excerpt from the textbook NEW CROWN English Series 1 (2020)

Here, students are asked to consider two questions by the textbook character: (1) What kind of words follow *can* and *cannot*? (2) What is the difference in meaning between *can* and *cannot*? While answering these questions, students can build up their explicit grammatical knowledge by comparing contrasting schemas. Therefore, this kind of section, which enhances metalinguistic awareness, should be incorporated in all textbooks to avoid one-way explanations.

Even though further research is needed, it is clear that languaging helps not only the learners but also the EFL teachers who are looking for an effective way to give feedback to their students and to make their English classrooms more learner-centered.

5. 3 Limitations of the study and directions for further study

Although the shortcomings of the pilot studies were revised as much as possible, the main study still had limitations and methodological problems that restricted its generalizability. First, this research focused on investigating the effect of languaging on the use of a single morpheme, the third-person singular "-s." A more comprehensive range of structures needs to be taken up, such as tense and aspect, to comprehend the English learners' knowledge of the L2 verb system. Furthermore, according to Ferris (2002), the third-person singular "-s" is a "treatable error" that has a rule-governed grammatical structure. She states that for learners, the rule itself is relatively easy to understand, thus, learners can correct their own errors once they understand the rule and have the time to reflect on their performance. Errors in the third-person singular forms usually have no effect on comprehension or meaning conveyance, either. However, there are more troublesome "untreatable errors" such as problems with word order, word choice, or sentences with missing or unnecessary words. It is generally agreed that these errors interfere with comprehending texts or with conveying meaning. Ferris argues that teachers tend to and need to give learners "direct correction" to

modify such errors.

Since this research shows that languaging can be at least as effective as teachers' direct corrections, there is a clear likelihood that it may work in inculcating other grammatical features provided that two other points are verified: (1) whether languaging is effective on other treatable errors as categorized by Ferris, such as "verb tenses" or "article usage," and (2) whether it is applicable to untreatable errors, such as word order mistakes.

Second, another limitation of the main study is that it compared two groups that received feedback under different conditions. In this research, there was no control group that was not provided with any feedback by the teacher. Instead, a group that received direct error correction was compared with the languaging group because of pedagogical considerations. To investigate the positive effects of languaging more comprehensively, a direct comparison should be conducted between a languaging group and a "no treatment group."

Third, this research did not compare the different effects of languaging individually whereas Swain et al. (2009) examined the different effects of languaging done individually. In comparison, this study explored the different effects between languaging done in pairs and individual review of direct corrections without languaging. The reason this research did not employ individual languaging had to do with the participants' English proficiency level and their age. Based on the findings by Swain et al. and Suzuki and Itagaki (2009) which

showed that individual languaging did not work well for lower proficiency learners, and considering the level and age of the learners in the current study, it was decided that pairing students and letting them correct errors cooperatively and collaboratively would render a more beneficial result. The advantage of this treatment is that even if one student cannot find the correct forms alone, it may still be possible to solve linguistic problems with a partner.

Fourth, the participants in the study were not familiar with using an IC recorder for their utterances. Therefore, it was difficult for them to record their utterances in class. In fact, two students were too nervous and failed to record their utterances in the speaking test.

Still another limitation of this research is that the effect of cram schools or other learning opportunities of studying outside the class was not taken into consideration. Ellis (2006: 5) points out that "Human learning is sensitive to frequency: the more times a stimulus is encountered, the faster and more accurately it is processed." Although about half of the participants studied at cram schools, the material they covered was not checked. Hence, there was a possibility that learning experiences outside the classroom had some effect on the results. Therefore, a questionnaire asking about the materials and activities covered in cram schools should have been conducted. The lack of considering the effects of such extracurricular learning may have harmed the uniformity of conditions of the experimental treatment.

The number of participants was also limited. There were only 27 students in the

languaging group and 26 in the direct correction group. Moreover, when the languaging group was divided into the MSW, MS, RW and R subgroups, these consisted of only eleven, five, three, and three students each. Hence, the score of one student strongly affected the subgroup results. Further studies with a larger number of students in each group would be required to make the results more reliable.

Moreover, more detailed data analysis should have been carried out. In both the pilot studies and the main study, spelling mistakes and morphemic errors were ignored; if the students used the third-person singular "-s," the sentences were regarded as correct. However, these mistakes should be examined separately, since the level of understanding the concept of the third-person singular "-s" will be different between the students who can use the target form correctly and those who still have spelling mistakes or morphemic errors. It should be possible to examine the learners' developmental stages, to determine, for example, when learners overgeneralize the third-person singular "-s" or be-verb *is*, and when they become able to use it correctly, and thus to find out the stage at which languaging is more effective. Furthermore, such approach to learner language would have allowed a more detailed examination of whether the developmental stages are different in speaking and writing. It is noteworthy that the students in the MS group were able to use the third-person singular "-s" correctly in speaking but not in writing. This result was discussed as partly due to the fact that the students seemed to use a limited number of familiar verbs repeatedly in speaking,

whereas they used a larger variety of verbs in writing but made more mistakes precisely because of the variation. In short, the results in speaking and writing were not consistent. Hence, there is a possibility that the learning process of the third-person singular "-s" may differ between speaking and writing.

To compensate for these limitations, in subsequent research, the developmental stages in the acquisition of the third-person singular "-s" should be investigated in more detail, to find out other possible reasons the MS group students could not use the third-person singular "-s" accurately in writing, whereas they were able to do so in speaking. To examine further the learners' developmental stages in different modes, first, it is necessary to institute a more fine-grained point system where 3 points are given to correct verb forms, 2 points for verb forms which contain spelling or form mistakes, 1 point for verb forms which use the third-person singular "-s" with be-verbs or auxiliary verbs at the same time, and 0 points for verb forms with no "-s." In this way, the effect of languaging according to learners' developmental stages may become clearer. In addition, qualitatively examining the types of verbs and the number of verb forms which individual learners use might contribute to finding the possible differences in the developmental stages between speaking and writing.

The effects of languaging on the use of negation for third-person singular verbs is another possible line of future inquiry. As it was mentioned in 4.2.3, understanding English negations requires a rather high level of understanding, and learners follow certain

developmental stages. Therefore, it will be worth examining whether languaging has a positive effect on facilitating the learning process of negative structure. Other research interests are in investigating the efficacy of languaging on the use of other grammatical features, such as the passive voice and comparatives, which generally take time for Japanese junior high school students to acquire (Tono 2007). It is particularly difficult yet essential for Japanese learners to acquire such grammatical constructions that are quite different from those in their mother tongue.

Furthermore, a comparison with a control group which does not receive any corrective feedback from a teacher should be made. Follow-up treatments after the research would be needed as well, to compare results and to verifying the long-term effects of languaging in helping learners to improve their accuracy in the use of a grammatical structure in writing and speaking. Taking pedagogical ethics into consideration, a follow-up measure could be employed so that the control group could also receive languaging treatment after the experiment. Finally, it should also be worth examining the efficacy of languaging when it is integrated with other language activities, in particular task activities in which students can express their ideas, feelings, and thoughts.

Although there are many points to be modified in the research design, including further qualitative analysis of individual student's interlanguage, this study was able to offer significant suggestion to be adopted in English language teaching in Japan. First, the findings

imply that the role of teachers should be redefined so that they facilitate more student involvement in learning new grammatical features. Second, in teaching students who overuse the be-verb *is* and the third-person singular "-s" together, their attention should be shifted to the differentiation of verb types, not just the fact that the subject is third-person singular. Third, the result suggests that an effective pairing system in class might be that in which a slow learner is paired with an advanced learner. Such pairing may lead to a ripple effect, where the more advanced learners can help the slower learners who could not initially solve the linguistic problems by themselves.

Albeit the limitations, the current study examined the effects of languaging for junior high school students in a foreign language learning environment, which was lacking in the field. In this respect, this study has made a contribution to second language learning and teaching by showing the potential of languaging for young learners.

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Appendices

Appendix A Worksheet used by students in the first pilot study

次の英文を読み，ペアで文法をチェックしてみよう！

(Read the next sentences and correct the errors with your partner.)

1

I practices tennis in the morning.

My father play baseball too.

But my mother isn't play sports.

My brother practice baseball.

But he isn't practice baseball every day.

We practices baseball every Sunday.

We aren't practices baseball on Saturday.

2

I like dogs. I has one dog. His name has Shiro.

Ayako and Yukiko is my friend.

Yukiko don't like cats.

She don't have a pet.

Ayako and Yukiko likes sports.

Ayako isn't like tennis. But she play table tennis.

Ayako and I likes tennis.

Ayako and I aren't like tennis.

We likes tennis.

Appendix B Students' post-test in the first pilot study

≪問題≫S 中 ALT のジョセリン先生は最近日本のアニメ，サザエさんに興味があるそうです。そこで，下の情報を参考に，サザエさんについてできるだけたくさんの情報を書き，ジョセリン先生に教えてあげましょう。

≪Question≫ Your teacher, Jocelyn is interested in Japanese animation. Now, she wants to know about *Sazae-san*. Please tell her as much as you can about *Sazae-san*.

- Here is some information you may use.

名前	出身	年齢	兄弟/姉妹	ペット	好きなこと	嫌いなこと
磯野さざえ	Fukuoka	24	カツオとワカメ	ネコ(タマ)	テニス，本，料理，編み物，買い物	柔道

【注意事項】

・１０分間で書きましょう。
・友達との相談は×。
・未習語や分からない単語はカタカナやローマ字でも良いです。

【Matters to be attended to】

・Finish writing in 10 minutes.
・You cannot use a dictionary or discuss your writing with your friends.
・If you cannot find the word you want to use, you can write it in Japanese.

Appendix C Students' delayed post-test in the first pilot study

≪問題≫

下の表はドラえもんの紹介とドラえもんの１週間のスケジュールです。それぞれの情報を英語に直して書きましょう。

≪Question≫ Here is some information about *Doraemon* and his weekly schedule. Let's tell Jocelyn as much as possible about *Doraemon*.

名前	出身	誕生日	兄弟・姉妹	好きなもの	嫌いなもの
Doraemon	21 century	9 月 3 日	1 sister (弟はいない)	Dorayaki	ネズミ a mouse

・ドラミ（Dorami）はメロンパン(=Melon Pan)が好き。ゴキブリ(=a cockroach)は嫌い。

・Dorami's favorite food… Melon Pan.　dislikes… cockroaches

曜日	on Sunday	on Monday	on Tuesday	on Wednesday	on Thursday	on Friday	on Saturday
予定		テニスを する tennis		日本語の勉強 をする	野球をする baseball	コンピュー ターをする	

【注意事項】

・１０分間で書きましょう。

・友達との相談は×。

・未習語や分からない単語はカタカナやローマ字でも良いです。

【Matters to be attended to】

・Finish writing in 10 minutes.

・You cannot use a dictionary or discuss your writing with your friends.

・If you cannot find the word you want to use, you can write it in Japanese.

Appendix D Number of correct verb forms students wrote

(1) Number of correct verb forms that the students in the MSW group wrote

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
J	0	5	4	4
C	0	3	4	5
N	0	4	3	3
Y	0	1	0	1
E	0	3	5	5
F	2	3	3	4
P	3	5	3	3
T	4	6	4	4
Z	0	3	3	4
D	0	5	3	3
AB	2	3	5	5

(2) Number of correct verb forms that the students in the RW group wrote

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
X	0	5	1	2
V	0	5	3	4
U	0	3	4	4

(3) Number of correct verb forms that the students in the MS group wrote

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
W	4	4	4	4
AE	0	4	0	5
K	5	7	0	6
H	0	2	0	3
A	0	6	0	4

(4) Number of correct verb forms that the students in the R group wrote

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
Q	0	3	0	2
S	0	3	2	2
I	1	3	3	4

(5) Number of correct verb forms that the students in the direct correction group wrote

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
1	1	2	4	4
2	0	2	4	4
3	0	3	1	3
4	0	2	1	2
5	0	3	4	4
6	2	4	1	1
7	3	3	4	4
8	0	3	0	2
9	0	5	1	6
10	0	2	0	2
11	0	3	0	2
12	1	2	2	2
13	0	6	0	6
14	0	2	0	2
15	2	3	3	3
16	0	2	0	2
17	4	5	5	5
18	2	5	3	3
19	5	5	4	4
20	1	2	3	4
21	0	2	0	2
22	0	3	0	4
23	0	2	1	3
24	3	3	2	4
25	0	2	0	2
26	0	5	0	5

Appendix E Number of correct verb forms students spoke

(1) Number of correct verb forms that the students in the MSW group spoke

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
J	0	4	1	3
C	0	3	2	4
N	0	2	3	3
Y	0	1	0	1
E	1	2	1	4
F	0	2	0	4
P	2	3	2	2
T	2	2	2	2
Z	1	3	2	3

(2) Number of correct verb forms that the students in the RW group spoke

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
U	0	3	2	5
V	0	3	3	4

(3) Number of correct verb forms that the students in the MS group spoke

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
W	4	4	3	4
AE	1	5	1	4
K	3	6	4	6
H	2	3	1	2
A	0	3	1	2

(4) Number of correct verb forms that the students in the R group spoke

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
S	1	3	1	2
I	0	3	3	4

(5) Number of correct verb forms that the students in the direct correction group spoke

	Pre-test		Post-test	
Students	Correct	Total	Correct	Total
1	1	2	3	4
2	1	3	4	4
3	0	2	1	2
4	1	2	1	2
5	3	3	4	4
6	0	2	1	1
7	2	3	4	5
8	0	3	0	2
9	0	3	0	2
10	1	3	1	1
11	0	2	1	2
12	1	1	1	1
13	0	3	0	4
14	0	2	0	2
15	1	2	2	3
16	0	2	0	2
17	4	4	5	5
18	1	3	2	3
19	2	5	3	5
20	0	2	2	3
22	0	3	0	4
23	2	2	1	1
24	4	5	1	5
25	0	1	0	1
26	0	4	1	3

Appendix F Extract of the achievement test

(1) Extract of the achievement test carried out in April 2013: Achievement test 1)

◇本文の内容について，次の質問に英語で答えなさい。答えは（　）内に 1 語ずつ書きなさい。(Read the text and answer the next question in English. One word should be written in each set of parentheses.)

What does Mary teach at high school?
She (　　) (　　).

(2) Extract of the achievement test carried out in November 2013: Achievement test 2)

①本文の内容について，次の質問に英語で答えなさい。答えは（　）内に 1 語ずつ書きなさい。 (Read the text and answer the next question in English. One word should be written in each set of parentheses.)

What sport does Nancy's mother like to play?
She (　　) (　　) (　　) (　　).

②次の条件に従って，英語 2 文であなたの友達の一人についての紹介文を書きなさい。
(Write two English sentences to introduce one of your friends according to the following instructions.)

【条件】(instructions)
①一文目は，友だちの名前を紹介する This ではじまる英文を書く。
(Write an English sentence that starts with *This* to introduce your friend's name.)

②二文目は，その友達の好きなこと，することについての英文を 4 語以上で書く。
(Write a sentence with more than 4 words to explain your friend's favorite thing or hobby.)

Appendix G Transcription of the students' languaging

Languaging Group	Student	Oral	Written
A: MS C: MSW	A:	動詞の後に s が付いてなくって，単語間違いと，あと，単数なのに a とかが入ってなかった。(I didn't add "-s" after the verb. I made a spelling error. I didn't add *a* (before a countable noun.)	A: She は文字の間違い。単位の時に a, an が入っていなかった。(I made a spelling error on the word *she*. I didn't add *a/an* before a countable noun.)
	B:	俺の所は，grandfather が old man になっている。あと，He like's のアポストロフィーがいらない。あと，fish のスペルが違う。(My error is in word choice; I should have written here *grandfather*, not *old man*. I don't need an apostrophe here on *He like's*. Also I made a spelling error on the word *fish*.)	B: fish スペル違い。old man→ grandfather。don't アポストロフィー。(I noticed a spelling error on the word *fish*. *Old man* should be written as *grandfather*. I don't need an apostrophe.)
	C:	三人称の s が抜けていて, バレーのスペルが違うのと，after のスペルを間違えた。after school の前に at を付けてしまった。(I forgot the third-person singular "-s." I spelled *volleyball* and *after* wrong. I added an unnecessary *at* before the words *after school*.)	C: 三人称の s が抜けていて，volley のスペルが違うのと，after のスペルを間違えた。after school の前に at を付けてしまった。(I forgot the third-person singular "-s," made spelling errors on the words, *volleyball* and *after*. I added an unnecessary *at* before the words *after school*.)
D: MSW E: MSW	D:	地区名の最初は大文字。あと, 動詞に s がついていない。(I should have started with a capital letter for the name of the place I live, and I didn't add "-s" to the verb.)	D: 1匹だから, a を付ける。三人称だから, s を動詞に付ける。地区の最初は大文字。(I should add "-s" for this singular noun. I should add "-s" to the verb when the subject is a third-person singular. I should start with a capital letter for the name of the place I live.)
	E:	何で動詞に s が付くの？(Why do we need to add "-s" to the verb?)	E: 三人称単数の s をつけ忘れた。(I forgot to add the third-person singular "-s.")
	D:	s 忘れてました。(I forgot "-s.")	
	E:	そういうんじゃなくて。三人称単数の，三単現の s を動詞に付けるのを忘れました。(Not like that. The third person… I forgot the third-person singular "-s.")	

	F:	She can play…	F: She→彼女のにする。her にする。 play →she だから s を付ける!! (The word *She* should be changed to *her*. I need to add "-s" to the word *play*, as the subject is *she*.)
F: MSW G: Z	G:	これ順番が違うよ, これ, He is almost every day play basketball って書いたのが順番間違えて, また, 順番を入れ替えるっていうのが直すとこ。(This is the wrong order. Here, "He is almost every day play basketball." is in the wrong order. So I should have amended it.)	
	F:	ここは？(How about this?)	G: 名前だから大文字。(You should start with a capital letter, as it is a name.)
	G:	これは名前だから, This is ダイゴ…って書いた所に, ダイゴの d が小文字だったので大文字に直す。(This is because it is a name. I should change *d* in the sentence "This is *daigo*" to a capital letter.)	
	F:	私は, She favorite キャラクター is の She を彼女のだから, Her にする。あと, She play handball every day.の play を she だから plays にする。(I should change *She* in the sentence "She favorite character is…" to *Her*. I should change *play* to *plays*, as the subject is *she*.)	
	H:	僕が間違ったのは, 人の名前の最初の文字を大文字にしなかったのと…。(I didn't write a capital for the first letter of someone's name, and….)	I: uses 複数形になっていない。 , コンマが入っていない。(I should write the word as *uses*. I didn't make it plural. I didn't add a comma here.)
H: MS I : R	I:	live...live…live's（アポストフィーを指して）え？この「点」いらないんじゃない？(live…live…lives (pointing to an apostrophe) Eh, I don't need this, do I?)	
	H:	ああ, 何か, コンマがいらないのと。(Ah, probably, you don't need a comma, and…)	
	I:	そうそう。分かんない。lives? (Yes, yes. I don't know, lives?)	
	H:	えーこれs？ですか？likes? like の s を付けなかったのと…。(Well…Is this "-s?" *likes*? I didn't add "-s" to the word *like* and…)	
	I:	これも s? s, s？(Do you need "-s?" "-s," "-s?")	
	H:	s, s でしょ？("-s," "-s," right?)	
	I:	He だから？(This is because the subject is *He*?)	

H: えー, sport の後ろに s を付けなかった。(Well…, I forgot "-s" in the word *sport*.)

I: 待って, 待って, 待って, 待って。lives ってそれで合っているの？(Hang on, hang on…is this correct, *lives*?)

H: He lives in London.

I: だよね。(教科書の)その変にあったよね。(Right. I saw the sentence somewhere in the textbook.)

H: もっと後ろだよ, 結構後ろ。バグパイプの所だよ。(That's in a later unit, the unit about the bagpipe.)

I: そうだ, バグパイプ。あった, あった。(Right. The sentence is in the unit about the bagpipe. You're right.)

H: あ, ホントだ。コンマがいらない。(Yes. I don't need a comma here.)

I: これって s？これ何？use…s いる？(Do we need "-s?" What should this word this word be? use…s?)

H: s じゃないっすか？She だから。(You need "-s," maybe, because the subject is *She*.)

I: She だから。want…want。She 欲しい。彼女は欲しい。(This is because the subject is She…want…want She want…She want….)

H: She want..new car. 誰(のこと)？(Who?)

I: 何これ？(How about this?)

H: at..at 違うか。(Is this wrong?) She went to new car?)

I: to? the？

H: She went to…She went the new car?

I: the か to っぽくない？(Probably, you need *the* or *to*.)

H: to っぽいけど調べよう。(Maybe I need *to*. Let's check the textbook.)

I: 調べよう。(Yes, let's.)

H: えっと…どの辺だっけ？あ, ラージだ, ラージ。あ, コンマ。(Well…let's see…Where it is? Ah. the unit about Raj, Raj. Ah, there is a comma.)

	I: あー。これ！コンマをつけてなかった。(Ah…I need a comma here.)	
J: MSW K: MS	J: 最初の he は大文字で，三人称がつくから s を入れて，サッカーを s・a・k・k・a じゃなくて，s・o・c・c・a・r にする。(I should change the first letter of *he* into a capital. I need "-s," because it's a third-person singular. I should change the spelling *sakka* to *soccer*.) K: 三人称の文の時は，動詞に s を付けて，lives とか likes にして，三人称の時は doesn't にして，don't じゃないようにする。人の名前で「ふ」の時は H じゃなくて F にする。(I should add "-s" to the verb when the subject is a third person, such as *lives* and *likes*, and change this to *doesn't*, not *don't*. The Japanese *Fu* is expressed as *F*, not *H*.)	J: 最初→H，三人称 s (The first letter → H, the third person "-s")
L: Z M: Z	L: This is *Chihiro*. He is a wonderful friend. He draws comic books. M: This is my mother. She works for my family. She works six times a week. She lives in *Chino*.（L, M ともに 2 回繰り返す）(Both L and M repeated the sentence twice.)	
N: MSW O: RW	N: これね，s 付けなきゃ。use の時 s 付けなきゃ。(You need "-s" here, (after) the word *use*.) O: use の時 s。(I need "-s" when I use the word *use*.) N: likes。he, she, 人の名前の時に s 付ける。(This word should also be *likes*. When the subject of a sentence is *he*, *she*, or someone's name, you should add "-s" to the verb that follows the subject.) O: he, she, 人の名前の時に s。全部？(When the subject of a sentence is*he*, *she*, or someone's name, I need to add "-s" to the verb that follows the subject. For all the verbs?) N: うん。ちゃんと s 付けないとダメだから。三単現の s は結構いるよ。(Yes. You need "-s." We use a	N: しっかり三単現の s を付ける。(Don't forget to add a third-person singular "-s.") O: He や She の時は三単現の s を付ける。(We need a third-person singular "-s" when the subject is *he*, *she*.)

third-person singular "-s" in many sentences.)

O: (ワークシートを見返し)これだけ？(Did I correct all the sentences?)

N: うん。こんくらいかな。しっかり, she, he, 人の名前の時は, 三単現の s を付ける。(You did. Don't forget when the subject of a sentence is a third-person singular, such as *he*, *she*, or someone's name, you should add "-s" to the verb that follows the subject.)

P: (ズのつく名前)これ s, じゃなくて z じゃないの？(You should write "-z," not "-s" here.)

P: MSW
Q: R

Q: はは。知ってるわ。気付いてたわ。次, 次。何でこれ, live でしょ？(Ha ha, I know. I have noticed the error by myself. Next, next. What's wrong, here? *Live*, right?)

P: s がない。三人称単数形の s。(You forgot "-s," the third-person singular "-s.")

Q: はぁ～。(ため息)えっと, s がついてないから。(Haaa. (Sigh) Well…I forgot "-s.")

P: ここもじゃん。(Here we need it, too.)

Q: ここも。ここも s がついてないから。(Here and here. I forgot "-s.")

P: ここは？何て書いてあるの？(How about this? What did you write about?)

Q: 中日。(*Chunich*i.)

P: 中日？ここも。(*Chunichi*? Here, too?)

Q: likes。

P: (自分のは)フルーツの s が複数形じゃないから。She often to talk…これ何で違うの？(My error is I forgot a "plural s" for fruits. She often to talk… "What's wrong?")

Q: to が一個足りない？o が。(You need another to? *o*?)

P: え, 違うでしょ。(I don't think so.) えー, ここ分かんないんだけど。飛ばして, ここは s が抜けているかな。(Well, I cannot find out the correct answer. Let's move on to the next sentence. I forgot "-s" here.)

P: flutes 複数形じゃなかったから。(This is because the word *fruits* wasn't plural.)
~~to~~ talk to がいらないから。(I don't need *to*.)
have→has 三人称単数形じゃなかったから。(I didn't make it the third-person singular.)

Q: 複数形の s を忘れていた。(I forgot the "plural s.")
ti ではなく chi, su ではなく zu。(*Chi*, not *ti*, *zu*, not *su*.)

	Q:	そう, そう。(Right, right.)	
	P:	have の複数形って has だっけ？have って何か。(The word *have* should be changed to *has* when it is plural?	
	Q:	have の has 複数形。(Is *has* the plural of *have*?)	
	P:	三人称単数形？(The third-person singular.)	
	Q:	そうだよ。そう。(Right, right.)	
	P:	ここは, has です。(Here it should be *has*.)	
	R:	僕の間違えたところは, テニスのスペルを t・a・n・n・i・s のが, ん？違う。te だったところ。(I made a spelling mistake. I should use *ta*, not *te* for *tennis*.)	R: テニスのスペルが (The spelling of tennis was…)
R: MS S: R	S:	私が間違えたところは…(My mistake is…)	
	R:	三人称。(A third-person (singular "-s")	
	S:	全部三人称じゃなかったところ。(All mistakes are related to the third-person (singular "-s")	
	R:	(それ)と？動詞が2つ。(And you used two verbs at the same time.)	
	S:	動詞が2つ入ってたところ。(I used two verbs at the same time.)	
	教師:	何で treasure じゃいけないの？こっちどうして直したの？(Why is the word *treasure* wrong? What did you correct here?)	T: gym は the が前に付く。 三単現の s。(I need *the* before the word *gym*. The third-person singular "-s.")
T: MSW U: RW	T:	三単現の s。(The third-person "-s.")	U: ティンパニーthe が入る。三単現の s。her→彼女を (I need *the* before the word tympanum. The third-person singular "-s." her→(Japanese translation of the word *her*
	U:	あの～三単現。(Well… the third person.)	
	教師:	こっちはどうして直さないの？理由も書いて, ここに。どうして, この s が必要なの？(Why didn't you correct this here? Please write the reason you need "-s" here)	
	T, U:	三単現の s が付くから。(This is because we need the third-person singular "-s.")	
V：RW W: MS	V:	何で？何で is いらないの？何でさ, is いらないの？(Why? Why don't I need *is* here? Why?)	V: 動詞に s がついているから。be 動詞はいらない。主語＋(動詞＋s)でできるの

	W: 三単現の s で，主語が he, she…(This word needs a third-person singular "-s." When the subject is *he*, *she*…)	で be 動詞はいらない。(There is a third-person singular "-s." So I don't need a be-verb. That consists of the subject + verb+s. So I don't need a be-verb.)
	V: 人の名前？(And someone's name?)	彼女は 寝ます 授業の中で(語順) She sleeps in class. (Word order)
	W: 人の名前だから，人の名前で，普通の一般動詞に s が付くから，be 動詞はいりません。(Yes, someone's name. So we add "-s" after the verb. You don't need a be-verb here.)	
	V: なるほど。is いらないということでいいですか？(I see. I don't need *is* here, right?)	
	W: はい。(Right.)	
	X: play が分かりません。何で He play ダメなの？先生。先生二人とも分かりません。(I cannot understand why the expression *He play* is not ok. Teacher, neither of us can correct the errors.)	X: s の理由 三単現の s。(The reason for "s": the third-person singular "-s.")
X: RW Y: MSW	教師: これさ，主語が he とか she の時には何か必要じゃなかったっけ？(You need something when the subject is *he* or *she*…)	Y: 三単現の s がついていないから。(Because I forgot the third-person singular "-s.")
	X: S だっけ。("-s?")	
	Y: S だ。(Right, "-s.")	
	X: S だ。全部 s だ。(We need "-s" for all of these sentences.)	
	Y: じゃあ，これもそうだ。(This sentence also needs "-s.")	
	X: 一人の時に…理由分かんないんだけど。先生，teacher，理由が分かりません。(When the subject is singular… I don't know the reason, but… teacher, I cannot find the reason.)	
	Y: めっちゃ発音いい。(You are good at pronouncing *teacher*.)	
	X: teacher, teacher，ねえ，先生。理由が分かりません。(Teacher, teacher, we cannot find the reason.)	
	Y: 三単現の s って言うんだっけ？(We call it the third-person singular "-s," don't we?)	

	X: 分かんない。(I don't know.) Y: これでいいんじゃない？三単現。三人称単数。(Maybe it's ok. The third-person singular.) X: 三単現。三単現の s？He like…何入れんの？カンマじゃね？(The third-person singular, the third-person singular "-s"? *He like*… what do we need here? A comma?) Y: カンマ？全部 s じゃない？like。全部三単現の s が入っていないから。(A comma? Maybe "-s" for all of these. None of these sentences has the third-person singular "-s.")	
Z: MSW AA: Z	Z: 何を説明したいの？(What do you want to say?) AA: ゲームの話。(I want to write about games.) Z: ゲームの話？(Games?) まず，紹介だから，ここに，This is my friend ×××.って書いて，He play, he plays ゲームの名前書いて，書く。(First, you should write, This is my friend ××× and then, write he plays… the names of games.)分かった？(Right?) ここの plays の場所違うから。This is の次にこれだから。(The word *plays* should be after the words *This is*.) (自分のは)live を lives で三人称単数だからして，like を likes にして，isn't じゃなく，doesn't にする。で，三人称単数だから，like に likes をつける。(My error is the word *live* should be changed into *lives* because the subject is the third-person singular, *like* should also be changed into *likes* for the same reason, and the word *isn't* should be changed to *doesn't*.)	Z: 三人称単数だから s をつける。doesn't にするのは，上の likes の s を取るために don't ではなく doesn't になる。(I need the third-person singular "-s." When I write the negative form of a sentence, I should write *doesn't*, not *don't*, and delete "-s" from the word *likes*.)
AB: MSW AC: Z	AC: ああ，これ like か。(Ah, this word should be *like*.) AB: likes, plays。 AC: こっちが play か。(Here is *play*. 間違えてた。ほらできた。(I made errors. I corrected all of them.) That is ×××. He play ベースボール(baseball). He like パズドラ (*Pazudora*).	AB: 一人のことだから a が付く。三単現だから s が付く。(I need *a* for a singular noun. I need "-s" for the third-person singular.)

	AB:	これどういうこと？She has...先生，これどうしたらいいですか？(What does this mean? She has… teacher! How should I change this?)
	教師:	それさー，どうして違うのかな？(Well. Why is this wrong?)
	AC:	これでいいんですよね？(This is ok, right?)
	教師:	何でそれ enjoy じゃダメなのかな？(Why is the verb *enjoy* wrong?)
	AB:	人が一人というか三単現だから。enjoys。普通にこれでいいですか？(That's because the subject is singular, the third-person singular, so it should be changed into *enjoys*. Is this ok?)
	教師:	三単現の s が必要だよね。(You need the third-person singular "-s," right?)
	AB:	She is good handball player.だと一人のこと言っているから，She is a handball player.的な。("She is a good handball player." refers to one person, so this sentence should be "She is a good handball player," right?) えっと，三単現の s だから，enjoy じゃなくて，She enjoys になる。三単現だから。(Well, this is the third-person singular "-s," so the word should be *She enjoys*.)
AD: MS AE: MS	AD:	play, study, have は三人称の表現に変えるということで，has と，ゲームの間にあるのは，この間に a を加えるっていうことで，あと，ゲームのスペルをよくすればよいと思う。(I should change the words *play*, *study*, and *have* to expressions using the third person, and I need to add *a* between the word *has* and *games*, and I should correct the spelling error of *games*.)
	AE:	人の名前は，始めの文が N，あとは三人称だから s をつける。(I should start with the capital letter *N* for the name, and I need "-s," because of the third person.)

Note: MSW= Spoken and written metalinguistic explanation group. RW= Repetition and writing group. MS= Spoken metalinguistic group. R= Repetition only group. Z= Zero participation group.

Appendix H Transcription of the MSW group's written data

Student	Pre- test	Post-test
C	This is *Maiha*. She is like volle ball. She is very good player. She is live in ×××. She is like pezz. She is practice volle ball at ofter school.	This is *Yusuke*. He is my brother. He likes beasball. He practices beasball every day. He likes bog. He haves two bogs. He don't likes school. But he likes PE. He treasures family.
D	This is *kouki*. He know many *zatugaku* (knowledge in various matters). He play basketball. He practice basketball almost every day. He have dog. He live in ×××.	N/A
E	This is アカリ (*Akari*). She live in *Chino*. She like frends. She like dog. She study English. She	This is *Akari*. Shi is studeing English now. Shi lives in *Chino*. She likes books. She has mane frends. She can cook cookies. She uses computer. She wants new pen.
F	This is マナミ (*Manami*) She lives in chino She faverit キャラクター (character) is キティ(Hello Kitty) She play ハンドボール (handball) every day She has two brothers We are friends	This is マナミ(*Manami*) She likes キティ(Hello Kitty) and ムーミン(Moomin) She plays ハンドボール (handball) every day She lives in *chino* We are friends She have two brothers.
J	This is *Keita*. he like sakka (soccer). he live in ×××. he have bouru. he play sakka (soccer) almost everyday. he don't play beisu bouru (baseball).	This is *Keita*. He likes soccer. He lives in *Thino*. He playes soccer almost everyday. He doesn't play tennis.

N	This is my mother. She live in *chono*. She treasure my family. She like *wagashi* (Japanese sweets). She don't like	This lis my mather. she lives in *chino*. she treasures my family. she likes *sushi* very much.
P	This is *Kurumi*. She lives in *Chino* city. She plays softball and she runs. She likes flute. She often to talk with me. She have many friends. I like her.	This is *Kurumi*. She plays softball. She likes it. She is in the softball team and Rikujou (track and field) team. She has many friends. Because she is very kind. I like her.
T	This is *Kouta*. He plays baseball. He lives in *Suwa*. He practices baseball every Sunday, Tuesday, Friday and Saturday. He study English. He goes to gym. He uses computer. He play basketball very well.	This is *Atsunori*. He plays baseball very well. He lives in *Hokkaido*. He practices baseball every day. He stays the USA now.
Y	This is *Kanna*. She is my friend. I like *Kanna*. She can play handball. She is practice handball almost everyday. She can study English.	This is *Kanna*. She can studys English. She can plays ハンドボール(handball). She is practices almost everyday. I like *Kanna*.
Z	This is my mother. She live in *Nagano*. She isn't like beef and chicken curry. She like listen to the music.	This is my Mather. She lives in *Nagano*. She likes misic. She is listen to misic every day. She doesn't like *sttake* (stake) and beef cury. She likes soping.
AB	This is *Nanami*. She is my friend. She plays ハンドボール (handball). She is good ハンドボール(handball) player. She has many friends. She enjoy life very much.	This is *Nanami*. She lives in Chino. She plays ハンドボール (handball). She is a good ハンドボール (handball) player. She practices ハンドボール (handball). She enjoys ハンドボール(handball) . She has many friends.

Appendix I Transcription of the MSW group's spoken data

Student	Pre- test	Post-test
C	This is *Maiha*. She She live in ×××. She like pizza. She practice volleyball. Volleyball is almost every day. She…	This is *Yusuke*. He is my brother. He likes baseball. He practice…practices baseball every day. He likes dog. He have dogs. He like dog. He have two dogs. He don't like school. But he like PE.
D	This is *Koki*. He is no many *zatsugaku* (knowledge in various matters). He play basketball. He practice basketball almost every day. He is bake (basketball)…He is bake *pan* (bake breads). He live in *Chino*. Thank you.	N/A
E	This is *Akari*. She lives in *Chino*. She like book. She like character *rilakkuma*. She like sports is tennis. Thank you.	This is *Akari*. She is studying English now. She lives in *Chino*. She…She have many friends. She like books. She likes book. She cooked cookie. She want new pen. Thank you.
F	This is *Nanami*. She favorite Character is *kitty* and *moomin*. She live in *Chino*. She play handball every day.	This is *Manami*. She live in *Chino*. She play Handball every day. She went new pen? She have two brothers. We are friend.
J	This is *Keita*, my friend. He like soccer. He live in ×××. He don't play baseball. He play soccer almost every day.	This is *Keita*. He play soccer. He live in *Chino*. He play soccer almost every day. He doesn't play tennis.
N	This is my mother. She live in *Chino*. She treasure my family.	This is my mother. She lives in *Chino*. She treasures my family. She likes *sushi* very much.

P	This is *Kurumi*. She plays softball and runs. She likes blue. She have many ??. I like her.	This is *Kurumi*. She plays softball. She likes it. She is in the softball team and *rikujou* (track and field) team.
T	He, This is *Kouta*. He plays baseball very well. He lives in *Chino*.	This is *Atsunori*. He plays baseball very well. He lives in *Hokkaidou*.
Y	This is *Kanna*. He is my friend. I like *Kanna*. She can play handball. He is practice handball almost every day. He can study English.	This is *Kanna*. She can study English. She can play handball. She is practice …every day. I like *Kanna*.
Z	This is my mother. She, she lives in *Nagano*. She isn't like beef and chicken curry. She like vegetable.	This is my mother. She likes shopping and music. She listen to music every day. She doesn't like *shiitake* (stake) and beefcurry.
AB	This is *Nanami*. She is my friend. She plays handball. She is good handball player. She has friends. She has many friends. She enjoy life very much. Thank you.	N/A

Appendix J Transcription of the MS group's written data

Student	Pre- test	Post-test
A	This is *Wakana*. She live in *Chino*. Sh like クラリネット (clarinet). She practice クラリネット (clarinet) every day. She don't like tea. She use CD プレーヤー (player). She know ベートーベン (Beethoven).	This is *Ayaka*. She is my sister. She study everybay. She have スマートフォン (cell phone). She live in *Chino*. She need 学力 (learning ability).
H	This is my friend *takuro*. He live's in *chino*. He like sport very much. He can play baseball very well.	This is my friend *takuro*. He live in *Chino*. He can play baseball very well. He play baseball almost everyday. He don't like Japanise (Japanese).
K	This is *Huyu*. She lives in *Chino*. She likes vocaloid and anime. She listen to music every day. She practice a table tennis. She plays the piano very well. She doesn't speak English very well. She studies Japanese very well.	This is *Fuyu*. She is has a lot of VOCALOID CD. She is likes VOCALOID and anime. She is plays table tennis. She is lives in *Chino* city. She is treasure book. She is listen to music every day. She is has a iPod touch.
W	This is *Hayato*. He likes soccer. He practices soccer almost every day. He studies English. He doesn't play baseball.	This is *Hayato*. He likes soccer. He practices soccer almost everyday. He studies English. He doesn't play baseball.
AE	This in *natsumi*. She practice piano and バイオリン (violin) almost everyday. She like ボーカロイド (VOCALOID). She have ギター (guitar) and バイオリン (violon). She don't like PE.	This is *Natsumi*. She live in *Nagano*. She like ボーカロイド (VOCALOID). She practice piano and バイオリン (violon). She have a ギター (guitar). She don't like PE.

Appendix K Transcription of the MS group's spoken data

Student	Pre- test	Post-test
A	This is ?? *Kanna*. She is play clarinet. She practice clarinet every day. She hve clarinet. She have many friends too.	This is *Ayaka*. She…She has smart phone. She… She live in *Chino*.
H	This is my, This is my friend *Takuro*. He live in *Chino*. He likes sports very much. He play, He plays baseball almost every day. He can play baseball.	This is my friend *Takurou*. He live in *Chino*. He can play baseball very well. He plays, He plays baseball almost every day.
K	This is *Fuyu*. She live in *Chino*. She likes bokaroido and anime. She practice a table tennis. She haves a bokaroido CD. She doesn't study English. She play the piano very well.	This is *Fuyu*. She lives in *Chino*. She likes Bokaroido and Anime. She is treasure book. She plays table tennis. She practice table tennis. She has a lot *Poplerushiri*
W	He…This is *Hayato*. He likes soccer. He practices soccer. He plays soccer. He studies English.	This is *Hayato*. He like soccer. He practices soccer almost every day. He studies English. He doesn't play baseball.
AE	This is *Natsumi*. She lives in *Chino*. She like bokaroido. She have piano and violin. She practice piano and guitar most every day. She don't like PE. She don't like basketball.	This is *Natsumi*. She likes music. She like bokaroido. She…lives in *Chino*. She practice piano and guitar. She don't be he??

Appendix L Transcription of the RW group's written data

Student	Pre- test	Post-test
U	This is *Nonoka*. She play ティンパニー (tympanum) very well. She treasure friends. She like comic books. I need *Nonoka*. She with talking very much. I like *Nonoka*.	This is *Nonoka*. She is from Japan. She likes music. She plays ティンパニー (tympanum). She likes ティンパニー (tympanum) very well. She lives in ×××. She likes comic book. She studys very well. I like *Nonoka*.
V	This is *Nanami*. She is plays ハンドボール (handball) very well. She is lives in *Chino*. She is runs easily very much. She is practices ハンドボール(handball) almost everyday. She is class in sleepes, sometimes. She is best my friend.	This is my mother. She lives in *Chino*. She likes a book and cook. She cooks very well. She likes not カエル (frogs). She is good mother. I like her. Thank you.
X	This is *Riku*. He play 野球 (baseball). He practice 野球 (baseball) almost everday. He like 象さん (elephants). He want 象さん (elephants) . He know アードス君 (*Ardos kun*).	This is *Riku.* He want 象さん (elephants). He likes 象さん (elephants).

Appendix M Transcription of the RW group's spoken data

Student	Pre- test	Post-test
U	This is *Nonoka*. She is like *timpani* (tympanum). She play the *timpani* (tympanum)very well. She have man???	This is *Nonoka*. He likes *timpani* (tympanum). He play *timpani* (tympanum) very well. He likes comic books. He study music. She lives in ×××. She is mone? She have…She have *sutekki* (a stick).
V	This is *Nanami*. She is plays handball very well. She is practice handball every day. She is runs easily ???	This is my mother. She lives in *Chino*. She likes a book and cook. She cooks very well. She likes no? *kaeru* (frogs). She is good mother. I like her. Thank you.
X	This is *Riku*. He play baseball. He want elephant. He know audosukunn?? He, he practice baseball almost every day.	N/A

Appendix N Transcription of the R group's written data

Student	Pre- test	Post-test
I	This is mother. She likes *sushi*. She use a computer almost everyday. She want New car.	This is my mother. She lives in *Nagano*. She likes *sushi* and curry. She have car. She plays vatominton (badminton).
Q	This is *kasuma* He live in *Iida* He like baseball He have cat. He is *Chuniti doragons* fan. He like game.	This is *Kazuma*. he live in *Iida*. he like baseball. He interesting memory remember. He like not ardos.
S	This is mother. She like アーティスト (musician) FUNKY MONKEY BABYS. She play cook everyday. She use computer almost everyday.	This is mother. She likes アーティスト(musician) FUNKY MONKEY BABYS. She wants ファンモン(*Fanmon*) CD.

Appendix O Transcription of the R group's spoken data

Student	Pre- test	Post-test
I	This is mother. She like *sushi*. She use a computer almost every day. She want new car.	This is my mother. She lives in *Nagano*. She likes *Sushi* and curry. She…She have a car. She plays badminton.
Q	N/A	This is *Kazuma*. He like baseball. He???. This is *Kazuma*. He like baseball. He like not ados??
S	This is mother. She likes artist funky monkey babies. She…She play cook every day. She use computer every day.	This is mother. She like artist funky monkey babies. She rents funky monkey babies CD.

Appendix P Students' comments about working in groups

Dictogloss でのグループ活動後の生徒の感想より（下線は筆者による）
(Underlining by the researcher)

・まず先生の言うことをメモする時，言っていることが聞き取れることが嬉しかった。メモしたものから，文を作ることができたのも良かった。今まで習ったことであれだけの文を作れることが面白かった。もっと文の形を考えてたくさんの文を作れるようになりたい。（女子）

(I was happy when I was able to understand what the teacher said when I took notes. I was also happy that I was able to construct sentences using the notes I took. It's fun to make sentences using the knowledge I learned. I want to be able to write considerable sentences.) Girl

・紹介をする文を通して，単語をたくさん覚えられたし，文の書き方が上手になりました。スピーチがいまいちなので，もっと頑張りたいです。Very Happy. （男子）

(I was able to learn considerable amount of words while writing sentences. Also, I feel I have become better at writing sentences. Although I want to improve my speaking ability more, I am very satisfied.) Boy

・小さい間違いとかあって，改めて英語って難しいなぁと思いました。でも，みんなのもっている力を出し合い協力しながら文を作れたし，発表も助け合いながらできたので，またつながりを強められて良かったです。文を考える時はすっごい楽しかったです。（女子）

(I thought it was hard to pay attention to the details of English expressions. However, by working on the tasks, we were able to cooperate with each other and found the solution. I felt a strong bond with my classmates. It was a lot of fun to construct sentences with my friends.) Girl

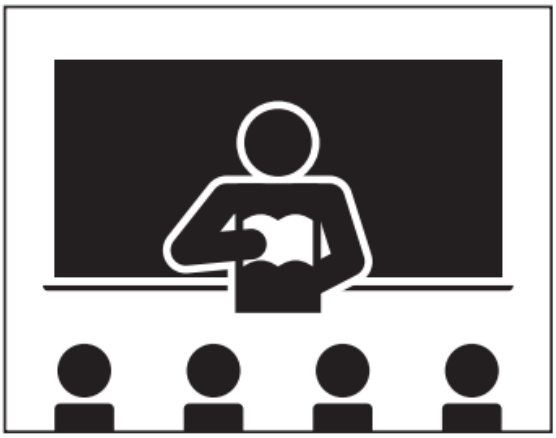
・一度聞いて，意味を考えながらメモして，それをグループで再構成する時，同じ班の人に「ここはこうしてみたら？」とか「ここに"a"が付いていないよ」とかアドバイスを受けながら文を作るのは「なんかちょっとかっこいいなー」と思ったし，だいたいでしか分からなかった表現をちゃんと英語で書けたりしたのが「頭に入っているんだなー」っていうことが実感できてすごく楽しかった。友達とアイディアを出し合うのがとても楽しかったので，またやりたいです。（女子）

(It was cool to discuss in a group and say things like, "Why don't we change the sentence like this?" and "We need *a* here". At first, I could not fully understand the expression, but I became to be able to understand deeply while correcting the errors with my friends. I want to do it again since it was a lot of fun to exchange ideas with a friend.) Girl

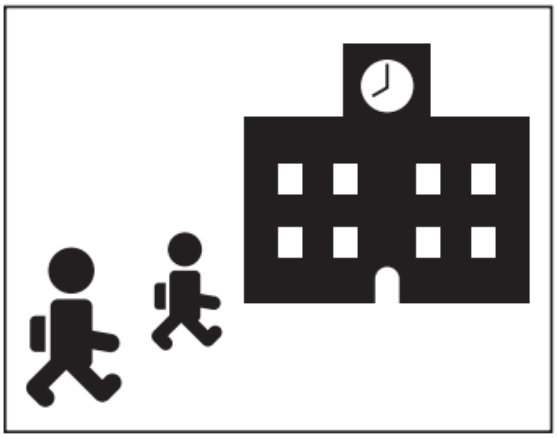
Appendix Q　平成 31 年度（令和元年度）全国学力・学習状況調査 調査問題 英語（抜粋）
Extract of the national assessment of academic ability in English for the third year of lower secondary school

10　海外のある町が，外国人旅行客にも分かりやすいタウン・ガイドを作成するために，「学校」を表す２つのピクトグラム（案内用図記号）のうち，どちらがよいかウェブサイトで意見を募集しています。どちらかの案を選び，２つの案について触れながら，あなたの考えを理由とともに 25 語以上の英語で書きなさい。

【 A 】



【 B 】



※　短縮形（I’m や don’t など）は１語と数え，符号（ , や ？ など）は語数に含めません。

（例）　No,　　I’m　　not.　　【３語】

Appendix R 平成 31 年度（令和元年度）全国学力・学習状況調査　報告書　中学校英語
Extract of the reports of the national assessment of academic ability in English for the third year of lower secondary school

Type of the answers and the response rate

問題番号		解答類型		反応率(%)	正答
10			（正答の条件） 次の条件を満たして解答している。 ① どちらの案がよいか，１つ選んで意見を書いている。 ② 選んだ理由等について，２つの案に触れながら書いている。 ③ 25語以上の英語で書いている。 （正答例） ・I think A is better. It shows a teacher and students in a classroom, so it looks like a school. I don't think B is good because it looks like a library. [32 words] ・I think B is better. It shows that students are walking to a building. People will understand it is a school. When people see A, they may think it is a *juku*. [32 words]		
		1	条件①，②，③を満たし，正確な英語（語や文法事項等の誤りがない）で解答しているもの	0.1	◎
		2	条件①，②，③を満たし，おおむね正確な英語（コミュニケーションに支障をきたすような語や文法事項等の誤りがない）で解答しているもの （正答例） ・I think A is better. It show a teacher and students in a classroom, So it looks like a school. I don't think B is good becouse it looks like a library. [32 words]	0.5	○
		3	条件①，②，③を満たして解答しているが，２つの案の触れ方について具体性に欠けるもの（コミュニケーションに支障をきたすような語や文法事項等の誤りがないものを含む） （正答例） ・I think A is better. It shows a teacher and students in the classroom, so it looks like a school. I don't think B is good. [26 words]	1.3	○
		4	条件①，②，③を満たして解答しているが，コミュニケーションに支障をきたすような語や文法事項等の誤りがあるもの	33.0	
		5	条件①，③を満たし，条件②を満たさないで解答しているもの	4.1	
		6	条件②，③を満たし，条件①を満たさないで解答しているもの	5.5	
		7	条件③を満たし，条件①，②を満たさないで解答しているもの	5.2	
		8	条件③を満たさないで解答しているもの	28.9	
		99	上記以外の解答	13.4	
		0	無解答	8.1	

平成 31 年度（令和元年度）全国学力・学習状況調査　報告書　中学校英語
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