Exploration Into the Effects of Recasts and Self-initiated Self-repair During the Output-based Interactive Activities on Japanese EFL Learners’ English Learning.

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Chapter 1

Introduction

1.1 Background

It is well known that English language instructions in Japan have been mainly comprehension and translation-based since the Meiji era and it has focused on written materials. Admitting the importance of input obtained through reading, we need to keep good balance between input and output by providing students with more opportunities for output as a focus in second language teaching. Ellis (1997a) criticized the situation in Japanese English education by mentioning that much of English teaching was taken up with the teaching of grammar and many of Japanese students left school with no procedural ability to communicate in English. I’m afraid that there are still situations in which students are supposed to sit still to listen to teachers in order to gain knowledge about English without being given opportunities to use English. In order to develop students’ fundamental and practical communication skills, improving students’ grammatical knowledge, we need to introduce activities which require students to produce output in English.

“Foreign language activity” at elementary school is now compulsory in the fifth and sixth grades, and the government’s council agreed a proposal for university reforms and the globalization of education on May 22, 2013, including a plan to introduce English-language courses in the fifth and sixth grades. In high school, teachers are now supposed to conduct their English lessons mainly in English to develop students’ communication abilities. English language education in Japan is going through a major transitory period these days. Most of
the Japanese junior and senior high school teachers of English also know the importance of teaching English not just as a subject but as a language and some of them actually are working further their efforts to make their teaching more communicative in order to improve students’ communicative skill or communicative competence.

In English class conducted basically in English that utilizes output-based activities, interactions between teachers and students or among students themselves naturally occur. In the early version of the Interaction Hypothesis, Long (1983) attached importance to the role played by meaning negotiation through interaction in providing learners with comprehensible input. In his more recent Interaction Hypothesis (1996) he suggests that meaning negotiation also has another role: by being given negative feedback by means of recasts and by being given opportunities to reformulate their own erroneous utterances to be more target-like, learners can acquire the target language. The main topics of my thesis research are recasts and self-initiated self-repair whose crucial roles are stated in Long’s Interaction Hypothesis (1996).

In second language acquisition (SLA) research, corrective feedback has been one of the foci and studied in English as a second language (ESL) as well as a foreign language (EFL) settings. The recast is one of the types of corrective feedback which has been widely studied because of its potential for enhancing second or foreign language learning. However, most of the previous studies on recasts were conducted in ESL environments in which learners have a need for communication in and natural exposure to the target language or in EFL settings with relatively highly motivated proficient learners. Few studies have examined recasts in this Japanese EFL learning environment in which learners do not have an actual need for communication in or exposure to English. In addition, most of the learners are learning English as one of school subjects for entrance examinations rather than a tool for communication, focusing on accuracy or gaining knowledge about English. It is doubtful
whether we could apply even a rich store of knowledge derived from recast research conducted elsewhere into the teaching in Japan. It is definitely needed to investigate recasts in the very setting of the Japanese EFL learning environment. Moreover, no studies have examined the effects of written corrective feedback in the form of recasts here. It is worthwhile to shed light on written recasts as well.

Self-initiated self-repair can be a cognitively higher level activity in noticing the gap than showing repair after being provided feedback such as recasts (e.g., Egi, 2010), because learners themselves have to initiate to repair their own erroneous utterances. In addition, it occurs constantly and prevalently as a normal learning/teaching strategy (Shehadeh, 2001). In Japanese senior high schools, classes average around 40 students, making it practically impossible for teachers to have frequent one-on-one interactions providing students with corrective feedback. Thus, in many cases, students are left to converse with other students in the L2, being asked to perform communicative activities without direct oversight by the teacher. In the situation, students are ideally notice their own insufficient utterances in order to carry out self-initiated self-repair. It is definitely important for Japanese learners to self-initiated self-repair their own previous insufficient utterances. However, few studies have examined the phenomenon of self-initiated self-repair in the Japanese EFL learning environment, either, which motivated me to explore into this topic.

1.2 Organization of the Thesis

The present thesis consists of 9 chapters including this introductory chapter. In chapter 2, at first, crucial theories in language acquisition that are related to this thesis are presented, followed by the literature relevant to recasts studies and research on self-initiated self-repair. Learning theories associated with recasts and self-initiated self-repair as well as studies investigating variables that can have impact on the effect of recasts and self-initiated
self-repair are reviewed in the chapter. Issues and problems of recasts and self-initiated self-repair, which are the motivations for the present thesis, are also reviewed.

Chapter 3 empirically investigates the extent to which learners would notice their teacher’s recasts in the context of dyadic interaction and how often recasts would be provided by the teacher adequately. Specifically, the study in this chapter focuses on examining the actual effects of recasts on low-level Japanese high school students while they are performing interactive communicative activities.

Previous research indicates that recasts are more helpful for high and intermediate learners than for low-level learners (e.g., Philp, 2003). Chapter 4 presents three studies which examined the effects of recasts on intermediate high school learners, who are more proficient and motivated in learning English than students who participated in the study in chapter 3.

Chapter 5 presents two studies which empirically examine learners’ noticing of recasts through stimulated recall interview. Stimulated recall, which is a retrospective method to elicit the thought processes involved in carrying out an activity (Gass & Mackey, 2000), can more precisely probe learners’ perception of recasts and the extent to which recasts can engage learners in a cognitive comparison, or noticing (Ellis, 1994). In the first study, the relation between learners’ noticing and their repair, and their perceptions of recasts are examined. The second study focuses on the effects of recast features on noticing.

Chapter 6 presents three empirical studies. The first study in the chapter examines the relation between accuracy and fluency in Japanese high school students’ writing. The findings of the study are some of the motivations to conduct the second study which explores into the effects of written recasts on university students’ essay writing: the development of accuracy, fluency and complexity from the first draft to the second one; variations of the relation between accuracy and fluency; and how effectively written recasts can lead students to correct their errors in the revision. The third study focuses on the relationship between the
effectiveness of written recasts and the grammatical difficulty of students’ errors to which written recasts are given.

Chapters 7 and 8 compose the second phase of the study in which studies on students’ self-initiated self-repair are reported. Chapter 7 empirically examines self-initiated self-repair attempts by lower-level high school students, with the specific purposes of examining the frequency of self-initiated self-repair during the communicative activities, and finding out the factors that hinder self-initiation.

Chapter 8 reports two studies which investigate self-initiated self-repair attempts and their effects on Japanese high school learners with intermediate English proficiency. The first study focuses on the occurrences and the success rates of self-initiated self-repair and the relationships with the types of triggers (students’ original errors), and the second study in the chapter specifically examines the effects of grammatical difficulty of triggers on the occurrences and the success rates of self-initiated self-repair.

Finally, Chapter 9 concludes the thesis. Reviewing the preceding chapters, this chapter provides a general summary, and theoretical and pedagogical implications for English classroom. After several crucial limitations of the present thesis are summarized, suggestions for future research are also discussed.
Chapter 2
Literature Review

In this chapter, crucial theories in second language acquisition that are related to this thesis are reviewed. Next, the findings obtained by previous studies on recasts and self-initiated self-repair are reviewed. Some issues on those studies are reviewed and discussed so that we could identify problems on them as well as a need of study on this area in this Japanese EFL learning environment.

2.1 Second Language Acquisition Theories

2.1.1 Input Hypothesis

Krashen (1981, 1985) claims that language acquisition is input-driven, meaning that acquisition is based primarily on what we hear and understand. His overall sketch of acquisition in the Input Hypothesis is one of the most influential theories claiming that input is essential to language acquisition. Krashen (1985) defines comprehensible input as input that is heard/read and that is slightly ahead of a learner’s current state of grammatical knowledge. Krashen defines a learner’s current state of knowledge as $i$ and the next stage as $i+1$. The input hypothesis argues that input must contain $i+1$ to be crucial for language acquisition, but it need not contain only $i+1$, and that if the learner understands the input and there is enough of it, $i+1$ will automatically be provided. That is, “if input is understood, and there is enough of it, necessary grammar is automatically provided and that the language teacher need not attempt deliberately to teach the next structure along the natural order—it will
be provided in just the right quantities and automatically reviewed if the student receives a sufficient amount of comprehensible input” (1985, p. 2). As for speaking, he states, “Speaking is a result of acquisition and not its cause. Speech cannot be taught directly but “emerges” on its own as a result of building competence via comprehensible input” (1985, p. 2). Krashen (1994) has concluded that language acquisition is input-driven and learners acquire second languages incidentally and subconsciously when they are able to comprehend the input they are exposed to.

Researchers have criticized the Input Hypothesis. For example, Gass & Selinker (1994) mention that the hypothesis itself is not specific as to how we should define levels of knowledge and that there is no way to know what a sufficient quantity of the appropriate input is. They also add the question that “we may be able to understand something that is beyond our grammatical knowledge, but how does that translate into grammatical acquisition?” (p. 150). Chaudron (1985) points out that the hypothesis lacks a sufficiently detailed psycholinguistic account of the perceptual mechanism of what constitutes \( i+1 \). He also notes that we may assume it refers to all level of L2 forms because Krashen leaves the linguistic scope of the hypothesis unclear.

However, there is no lack of theories or hypotheses which regard input as a precondition for learning. (e.g., Carroll, 1999, 2000; Chaudron, 1985; Gass, 1997; MacWhinney, 1987; Robinson, 1995; Schmidt, 1990; Sharwood Smith, 1986, 1993; Simard & Wong, 2001; Tomlin & Villa, 1994; VanPatten, 1996; White, 1987), and it is clear that the role of input in the process of second/foreign language learning is crucial.

2.1.2 Output Hypothesis

In Canadian immersion programs, learners receive a rich source of comprehensible input, and these L2 programs are thought to be among the most successful. However, some research
on these programs has shown evidence that indicates that merely providing a large amount of comprehensible input is not enough for the learners to attain a high level of L2 proficiency (Harley, 1993).

Swain (1985) argued that learners displayed numerous grammatical errors in their L2 because they were actually engaged in a small amount of production. By observing the programs, Swain concluded that although comprehensible input was invaluable to the acquisition process, it was not sufficient for learners to fully develop their L2 proficiency. She argued that if learners were to be fluent as well as accurate in the target language what they needed was not only comprehensible input but also comprehensible output. She claimed that “producing the target language may be the trigger that forces the learner to pay attention to the means of expression needed in order to successfully convey learners’ own intended meaning” (Swain, 1985, p. 249).

Swain (1993, 1995) has extended her first output hypothesis mentioning three functions. The first function is that output has a hypothesis-testing function. By producing output, learners are potentially testing their hypothesis about the target language, and by being pushed to produce output in the process of negotiation of meaning, they can produce more accurate target language. Second, output has a metalinguistic function. Swain (1995) claims, “as learners reflect upon their own target language use, their output serves a metalinguistic function, enabling them to control and internalize linguistic knowledge” (p.126). She means that output may force learners to move from semantic processing to syntactic processing. As Krashen (1982) has suggested that, “in many cases, we do not utilize syntax in understanding – we often get the message with a combination of vocabulary, or lexical information plus extra-linguistic information” (p. 66), it is possible to comprehend input to get a message without a syntactic analysis of that input. According to Swain (1995), if the contexts are such that the language produced by learners serves some genuine communicative function, output
serves the function of deepening the students’ awareness of forms, rules, and form-function relationship.

Thirdly, output has a noticing function as the following.

In producing the target language (vocally or subvocally) learners may notice a gap between what they want to say and what they can say, leading them to recognize what they do not know, or know only partially, about the target language. In other words, under some circumstances, the activity of producing the target language may prompt second language learners to consciously recognize some of their linguistic problems; it may bring to their attention something they need to discover about their L2 (Swain, 1995, pp.125-126).

She adds that noticing gaps “may trigger a cognitive process which might generate linguistic knowledge that is new for the learner, or that consolidates their existing knowledge” (Swain, 1995, p.126).

Swain and Lapkin (1995) mention one more function of output, that is, output enhances fluency through practice. Skehan (1995) also has the same view, and notes that fluency, the capacity of the learners to exercise their system to communicate meaning in real time, requires learners to exercise their memory-based system by accessing and deploying chunks of language.

Gass (1988) insists on the importance of comprehensible output in testing hypothesis by mentioning that this creates a feedback loop from output into intake component, where hypothesis formation and testing is considered to take place.

2.1.3 Interaction Hypothesis
The role of comprehension in second language acquisition has been of prime importance in much SLA research and theory (Loschky, 1994). The Input Hypothesis (Krashen, 1985) and the Interaction Hypothesis (Long, 1983, 1996) are the most influential SLA hypotheses concerned with the role of comprehension in SLA.

In the early version of the Interaction Hypothesis, Long (1983) attached importance to the role played by meaning negotiation through interaction in providing learners with comprehensible input. He argued that comprehensible input is necessary for learners to acquire a foreign or second language, and that modifications which take place during the meaning negotiations to solve communication problems can contribute to the establishment of comprehensible input. In this initial Interaction Hypothesis, Long (1983) mentions that comprehensible input that arises when the less competent learner provides feedback on his/her lack of comprehension assists acquisition. This suggests that we should create a situation where the less competent learner responds to the more competent learner or speaker to comprehend input. The hypothesis views language acquisition as totally input-driven, as does Krashen’s input hypothesis (1985). However, in his recent Interaction Hypothesis (1996) he suggests that meaning negotiation also has another role: by being given negative feedback by means of recasts and by being given opportunities to reformulate their own erroneous utterances to be more target-like, learners can acquire the target language. Ellis (2003) summarizes the Interaction Hypothesis as follows:

The Interaction Hypothesis then suggests a number of ways in which interaction can contribute to language acquisition. In general term, it posits more opportunities for negotiation (meaning and content) there are, the more likely acquisition is. More specifically, it suggests: (1) that when interactional modifications lead to comprehensible input via the decomposition and
segmenting of input, acquisition is facilitated; (2) that when learners receive feedback, acquisition is facilitated; (3) that when learners are pushed to reformulate their own utterances, acquisition is promoted (p. 80).

Interaction provides both input and output, and thus it has been accepted that there is clear evidence for a link between interaction and language learning (e.g., Mackey & Goo, 2007).

2.1.4 Noticing Hypothesis

Krashen (1982, 1985) has maintained that learners acquire a second language in a largely subconscious process, that is, learners acquire second languages incidentally and subconsciously when they are able to comprehend the input they are exposed to, and conscious learning serves merely to monitor or edit the form of utterances produced by the acquired knowledge.

However, Schmidt (1990) has argued, “subliminal language learning is impossible, and that noticing is the necessary and sufficient condition for converting input to intake” (p.129). According to his Noticing Hypothesis (1990), nothing is learned without noticing. Schmidt (1990, 1994,) has claimed that attention to input is a conscious process and that attention, noticing, and noticing-the-gap are essential processes in L2 acquisition. That is, for a learner to acquire some feature of language, it is not enough for the learner to be exposed to it through comprehensible input. The learner must notice what it is in that input that makes meaning. Schmidt has introduced his own experience as a learner of Portuguese in Brazil to demonstrate the importance of attention by showing that almost all new forms that appeared in his spontaneous speech were consciously attended to previously in the input (Schmidt & Frota, 1986).

Robinson (1995) has defined noticing as “detection plus rehearsal in short-term memory,
prior to encoding in long term memory” (p. 296). He mentions that activation in short-term memory must exceed a certain level before it becomes a part of awareness, identifying noticing with what is “both detected and then further activated following the allocation and attentional resources from a central executive” (p. 297). According to Robinson, resources may call for either data-driven processing (simple maintenance rehearsal of instances of input in memory) or conceptually-driven processing (elaborative rehearsal and the activation of schemata from long-term memory). That is to say, Robinson views awareness as the “function of the interpretation of the nature of the encoding and retrieval processes required by the task” (p. 301). He not only views awareness as critical to noticing but also distinguishes noticing from simple detection. By assigning simple detection without awareness, a less crucial role in the encoding of information into short-term memory in L2 acquisition than that espoused by Tomlin and Villa (1994), Robinson concurs with Schmidt’s Noticing Hypothesis which insists that no learning can occur without awareness at the level of noticing.

2.2 Oral Recasts Studies

2.2.1 Definitions of Recasts

As one particular type of corrective feedback, recasts have been receiving considerable attention (e.g., Egi, 2007; Ellis & Sheen, 2006; Iwashita, 2003; Long, 1996; Lyster & Ranta, 1997; Lyster, 1998a, 1998b). Lyster and Ranta (1997) defined the recast as reformulation of all or part of the students’ utterances. The following is an example of a recast from my study (Sato, 2013a).

Example 1
Student1: I like childs very much.
Teacher: Oh, you like children very much.←recast

Student 1: Yes. I like children very much, so I wanted to teach them how to play the piano.

Teacher: Did you actually do it?

In the example, the teacher provided a recast, which was a reformulation of the student’s incorrect utterance. Immediately after the student noticed the recast, she repaired it and they continued talking. However, there are multiple definitions of recasts (Loewen, 2009): in the previous studies on recasts, recasts have been defined differently by different researchers. Table 2.1 shows some of definitions proposed by L2 researchers.

Although there are subtle differences among definitions introduced in Table, 2.1, most of them include the reformulation of a learners’ utterances by teachers while maintaining the semantic aspect of the message. Long (2007) redefined a corrective recast as a reformulation of learners’ preceding utterance in which non-target-like item(s) is/are corrected to target language form(s) while the interlocutors’ focus is not on language but on meaning. In this study, following Long (2007), recasts are operationalized as the target language provided by either a NS or a NNS teacher, immediately after learner’s erroneous utterances, and intended for either corrective purposes, meaning negotiation, or both.

Recasts are, in general, considered as implicit corrective feedback reformulating all or part of ill-formed utterances provided by teachers without changing the central meaning (Iwashita, 2003; Long, 1996; Lyster, 1998a, 1998b). However, Ellis and Sheen (2006) argue that when the language is treated not for message conveyance but as an object—or the recasts are not communicatively motivated but didactically motivated—the recasts cannot be implicit but explicit. Analyzing the recasts from learners’ perspective, they also argue that when learners establish metalinguistic awareness from the recast this is due to their perceiving the recast as explicit correction. They conclude that recasts should not necessarily be regarded as
implicit but be taken as more or less implicit or explicit depending on how recasts are given by the teacher and how they are perceived by the students. As for the roles of positive evidence and negative evidence of recasts, Ellis and Sheen (2006) argue that if learners have no awareness of the corrective intention of the recasts they can be considered positive evidence, and if they interpret recasts as corrective they can be considered negative evidence. As there are various forms and functions of recasts, it can be argued that whether they are implicit or explicit/negative or positive is often unclear. Thus, in this study, recasts are regarded as a type of corrective feedback regardless whether it is implicit or explicit / positive or negative evidence.
<table>
<thead>
<tr>
<th>Authors</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>Long (1996)</td>
<td>“Utterances that rephrase a child’s utterance by changing one or more sentence components…while still referring to its central meaning” (p.434).</td>
</tr>
</tbody>
</table>
| Long et al. (1998)      | “Corrective recasts: responses which, although communicatively oriented and focused on meaning rather than on form…incidentally reformulating all of part of a learner’s utterance.”  
“Providing relevant morphosyntactic information that was obligatory but was either missing or wrongly supplied, in the learner’s rendition, while retaining its central meaning” (p. 358). |
| Doughty and Valera (1998)| “Grammatical information contained in corrective reformulations of children’s utterances that preserve the child’s intended meaning” (p. 25).                                                              |
| Ayoun (2001)            | “Verbal corrective feedback provided during the course of an interaction, in naturalistic or instructional settings” (p. 227).                                                                                     |
| Braidi (2002)           | “Incorporating the content words immediately preceding incorrect NNS utterance…changing and correcting the utterance in some way (e.g., phonological, syntactic, morphological, or lexical)” (p. 20). |
| Iwashita (2003)         | “Recasts are utterances that reformulate an interlocutor’s utterance without changing its meaning” (p.15).                                                                                                   |
| Lyster (2004)           | “A well-formed reformulation of a learners’ nontarget utterance with the original meaning intact”(p403).                                                                                                   |
| Sheen (2004)            | “Recasts refer to the reformulation of the whole or part of learner’s erroneous utterance without changing its meaning” (P. 278).                                                                                   |
| McDonough & Mackey (2006)| “Recasts are more target-like ways of saying what a learner has already said” (p. 694).                                                                                                                    |
| Lyster & Mori (2006)    | “The teacher implicitly reformulates all or part of the student’s utterance” (p.271).                                                                                                                     |
2.2.2 Uptake, Repair and Needs-repair

Uptake is learners’ immediate response that constitutes a reaction to a recast (Lyster & Ranta, 1997). In Example 1 above, the teacher provided a recast, and after the student noticed the recast, she repaired it and they continued talking. As is seen in this example when the learner successfully corrected the original error after the recast, it is categorized as repair in the previous recasts studies (e.g., Lyster& Ranta, 1997). In the following example from the current study, the student failed to correct his error after a recast is given.

Example 2
Student2: I was belonged to the ESS club.
Teacher: You belonged to the club? ←recast
Student 2: Yes. I was. I had a lot of friends.

In a situation when repair is still needed in learner’s response or the learner repeated the same error or made another error after the recast, as is shown in Example 2, uptake is coded as needs-repair in the previous studies.

2.2.3 Effects of Recasts on Learning

2.2.3.1 Advantages of Recasts

There are convincing rationales for believing that recasts facilitate acquisition. Farrar (1992) has pointed out the roles of recasts in L1: they reformulate a syntactic element; they expand a syntactic element or semantic element or both; the utterance in the form of the recast is semantically contingent; and recasts immediately follow the learner’s utterance.

A number of previous experimental studies have provided positive reports on the impact of recasts in L2 acquisition as well. Loewen and Philp (2006) examined the provision and the
effectiveness of recasts with adult learners of English as a second language classroom throughout 17 hours of interaction. Their study compared the incidence of recasts, elicitation and metalinguistic feedback, and the learner responses, or successful uptake, termed as repair, after these types of feedback. The results revealed that recasts were widely used and beneficial at least 50% of the time. Long, Inagaki, and Ortega (1998) found in their study with L2 Japanese and Spanish learners that recasts were more effective in achieving at least short-term improvements with a previously unknown L2 structure than preemptive positive input.

One rationale for using recasts is that they are not as intrusive as explicit correction, which can disturb the flow of communication, and thus can enable learners to integrate forms as the learners continue to speak (Doughty, 2001; Lyster, et al., 2013; Yoshida, 2010). Lyster (2007) states that recasts help maintain the flow of communication, keeping learners’ attention on content and enabling them to participate in interaction in which their linguistic abilities can exceed their current level.

Regarding teachers’ preference for recasts compared to other types of corrective feedback, Yoshida (2008) reports that recasts are favored in that they can create a supportive classroom environment and are efficient for time management. Zyzik and Polio (2008) also found that recasts were the most commonly used type of feedback in three university Spanish literature classes and discovered that recasts were the most preferred form of feedback by the instructors, as analyzed by the interviews and stimulated recalls.

Long (2007) concludes that L2 research findings have shown that recasts in the L2 are as effective as in L1. He states that recasts are not clearly necessary for acquisition but are facilitative and especially efficient for older, more proficient L2 learners in that they do not interrupt the flow of conversation, and thus keep learners focused on message contents.

There are not a lot of studies, but some researchers have paid particular attention to recasts
in the Japanese EFL situation. In a study which examined the effects of recasts provided on learners’ past or conditional errors, Doughty and Varela (1998) found that an experimental group that was given recasts showed greater improvements in accuracy and a higher total number of attempts at pastime reference than the control group. Muranoi (2000) in a quasi-experimental study focusing on college-level students in Japan, investigated how recasts benefit the acquisition of English articles. He found that recasts helped the development of learners’ interlanguage, both in written and oral tests. Loewen and Nabei (2007) examined how different types of feedback (i.e., clarification requests, metalinguistic clues and recasts) affect university students’ interlanguage development, and found that all feedback was equally effective. Sakai (2004) examined whether recasts would contribute to university students’ noticing and repairing language in later production, by comparing the effect of models. The results implied that recasts would have a more enhancing effect than models would, on noticing by Japanese learners of English.

2.2.3.2 Recast Features and Their Effects

Previous studies reported that recasts to learners’ grammatical errors were more frequently provided than to any other error types, such as lexical, phonological errors and L1 use (e.g., Kim & Han, 2007; Lyster, 1998b; Lyster & Ranta, 1997; Oliver, 1995; Zyzik, & Polio, 2008). However, the effectiveness of recasts measured by learners’ successful uptake or repair (i.e., learners’ correct reformulation of an error occurring immediately after a recast) can differ by the recast type. It has been reported that learners are less likely to repair after grammatical recasts (i.e., recasts to grammatical errors) than lexical and phonological recasts (e.g., Kim & Han, 2007; Trofimovich, Ammar, & Gatbonton, 2007; Sato, 2009a; Williams, 1999). Trofimovich et al. (2007) found that learners were more likely to detect lexical errors than grammatical errors when they received recasts, and in Egi (2007) it was observed that
students were more likely to interpret lexical recasts as corrective positive evidence than when provided with grammatical recasts. The more facilitative effects of phonological recasts over grammatical recasts are attributed to their salience and unequivocalness (Lyster, 1998b); moreover, erroneous pronunciation can more seriously interfere with understanding than grammatical recasts, making phonological recasts more salient (Mackey, Gass, & McDonough, 2000; Saito & Lyster, 2012). Trofimovich et al. (2007) suggest that in order for learners to notice their own grammatical errors through recasts and to reformulate them after recasts, learners should already have knowledge of the form.

As for the effects of oral recasts according to grammatical difficulty, Varnosfadrani and Basturkmen (2009) compared the effects of explicit correction and implicit correction (recast) according to grammatical difficulty by coding structures as either early developmental or later developmental, regarding the former as easy, and the latter as difficult. They found that recasts are more effective than explicit feedback on difficult structures. They concluded that easy structures are learned better with explicit correction and difficult structures learned with implicit correction (recast). However, whether recasts are more effective on easy grammatical structures than on more difficult ones, or vice versa, has yet to be examined.

In terms of the effects of recasts, judging by the difference between learners’ utterances and recasts, Philp (2003) concludes that recasts closer to learners’ utterances may be more beneficial to learners, and Sheen (2006) proved that the number of changes from learners’ utterances and recasts is an influential factor affecting learners’ perception of recasts: the fewer the number of changes, the better learners can repair.

From the results of previous studies, it can be concluded that short recasts are more easily noticed by learners than long recasts, leading them to repair previous erroneous utterances (e.g., Egi, 2007; Philp, 2003; Sato, 2009a; Sheen, 2006). Egi (2007) found, through a stimulated recall session, that learners failed to perceive long recasts as corrective but that this
was not the case with shorter recasts, thus concluding long recasts were less conducive. Philp (2003) explains that long recasts are difficult to retain in working memory as they may overload the time limitation of the phonological store. It can be summarized that long recasts are less effective due to the overloaded nature.

2.2.3.3 Phenomena

2.2.3.3.1 Acknowledgement

Learners often respond to recasts via verbal or non-verbal acknowledgement, such as “yes,” “mm”, or nodding. These learners’ acknowledgments were categorized as “needs-repair” (i.e., the learner repeated the same error or made another error after the recast) not “repair” (i.e., the learner successfully corrected the original error after the recast), in previous studies (e.g., Lyster & Ranta, 1997). However, acknowledgement or acceptance of the teacher’s correct version can mean an indication of what the learner really wanted to say, and understanding that the teacher’s version is better than the learner’s erroneous utterance. Even if learners fail to repair their erroneous utterances after recast, they may have made a cognitive comparison between the utterances, or at least understood the feedback given. Pica (1988) states that agreeing with or replying to a recast by simply saying “yes” is more appropriate, and suggests a non-native speaker’s (NNSs) response to a native speaker’s (NSs) feedback, other than acknowledgement, would be conversationally inappropriate. Sato & Lyster (2007) also add that it is appropriate for learners to simply acknowledge recasts so that they would not interrupt the flow of the conversation. As Kim and Han (2007) have suggested when students acknowledged, they may not have known which part of their utterance was wrong, but at least they must have learned that their utterance was incorrect. We could also assume that learners have noticed corrective intention of recasts when they acknowledged them.
Repair can be “evidence that learners are noticing the feedback” (Lightbown, 2000, p. 447), but the absence of a repair does not always mean learners’ noticing has not occurred: even when they failed to repair by producing the same error, another error, acknowledging or showing no response, learners could have noticed recasts.

2.2.3.3.2 Later Incorporation

Learners sometime produce a reformulated version of their errors, not just after recasts but in later turns. In this case, they self-initiated to produce correct forms. This type of self-initiated, modified repair, which came several turns after recasts in the current study, should be regarded as optimal for acquisition. Shehadeh (2001) argues that self-initiation means the NNS has realized that he/she needs to reformulate or modify output toward comprehensibility for successful transmission of the message. Lyster and Ranta (1997) argue that this attempt to produce more accurate and more comprehensible output will push learners to reprocess and restructure their interlanguage toward modified output. Ohta (as cited in Long, 2007) regards this type of later private speech from learners as evidence of the mental activity of cognitive comparison between their ill-formed output and recast. Gass (1997) argues that learners need to have further access to input so that they can show evidence that their interlanguage has changed, and she points out the possible delayed effect of negative feedback. Delayed self-initiated repair indicates that the learner has tested his/her hypothesis on the L2 form—previously produced erroneously—without being corrected immediately after a recast. It is assumed that hypothesis testing is happening (Swain, 1985; 1993) as one of the crucial functions in output.

2.2.3.3.3 No Opportunity

Both in laboratory and classroom settings, it has been reported that teachers or native
speakers do not provide students with opportunities to respond after recast. They often continue speaking after providing recasts, leaving no opportunity for students to show repair (e.g., Loewen & Philp, 2006; Oliver, 1995; Sato, 2006; Zhao & Bitchener, 2007). However, as Zhao and Bitchener (2007) claim, this “no repair” may not mean that students did not really understand the feedback provided as recasts. Oliver (1995) argues, if students had been given the opportunity to respond, some of them could have done so successfully.

2.2.4 Issues and Problems of Recasts

Previous studies have suggested some problems with recasts. One of the most noted problems with recasts as corrective feedback is ambiguity from a learner’s perspective, which may lead learners to perceive recasts as merely alternatives, not modification (Chaudron, 1988). Recasts can be perceived as confirmation, paraphrase or correction (Lyster, 1998a, 2007). Saville-Troike (2006) mentions that recasts, which are indirect correction, might apparently seem to be paraphrasing learner’s utterances, but actually are correcting elements of language use. Lyster and Ranta (1997) and Lyster (1998b) examined the occurrences of repair, defined as learners’ repaired correct utterances of their non-target utterances after receiving recasts, and found that learners did not often show repair. Both studies concluded that as recasts are implicit they are unlikely to benefit learners who may experience difficulty in differentiating positive and negative evidence.

Some previous studies showed that recasts were less effective than other types of feedback. Carroll and Swain (1993) revealed that metalinguistic feedback was better than recasts. Varnosfadrani and Basturkmen (2009) argued that explicit correction would induce learners’ awareness more than implicit correction such as recasts, referring to the crucial role of attention in learning. Carroll (2000) has stated that the best corrective feedback is the most explicit one which does not require learners to infer whether they have made errors, where the
errors are and how they should correct them. In the quasi-classroom study, Lyster (2004) compared the effects of recasts and prompts (i.e., clarification requests, repetitions, metalinguistic clues and elicitation), and statistically analyzed results of the written tasks revealed that students receiving prompts performed better than students receiving recasts.

Ellis and Sheen (2006) have pointed out problems in recast studies: (1) definitional fuzziness, that is to say, there are many types of definitions for recasts; (2) contextual factors, which means that recast studies in lab settings cannot be equated with those in classroom settings. Loewen and Philp (2006) summarizes that the likelihood of the effectiveness of recasts depends on: classroom context including the age of participants and which language is a focus of study; the context of the recasts within the discourse; variable elements of the recasts(this will be discussed in the next section).

2.3 Written Feedback in the Form of Recasts

2.3.1 Importance of Writing

Writing is one of the crucial skills in students’ English learning — whether in English as a second language (ESL) or English as a foreign language (EFL) — though even ESL learners struggle to produce linguistically correct writing (e.g., Hartshorn, Evans, Merrill, Sudweeks, Strong-Krause, & Anderson, 2010). Teachers may try to give the best feedback to help students improve their writing. Written feedback can be focused on form or on content, and both have been playing crucial roles in improving student writing quality (Coffin, Curry, Goodman, Hewings, Lillis, & Swann, 2003). Previous studies found that not only teachers, but students themselves prefer teacher written feedback (e.g., Nugrahenny, 2007; Saito, 1994). However, since Truscott’s claim (1996) that written corrective feedback would never improve learner writing ability—and may even be harmful—it has been debated to what extent learners can benefit from written feedback. There seems to be some agreement that learners
can improve their writing in a second draft on the same topic after being given corrective written feedback. (e.g., Ellis, Sheen, Murakami, & Takashima, 2008; Ferris, 1999, 2004; Truscott, 1996, 1999). However, to what aspect (e.g., accuracy, fluency, complexity in writing) or extent (e.g., how much errors or mistakes are corrected) they can demonstrate writing improvement has not been well researched.

2.3.2 Pros and Cons of Feedback in Writing

The positive effects of written corrective feedback in L2 writing classes has been debated since Truscott (1996) claimed that written corrective feedback would never improve learner grammatical accuracy in writing. As to the reason of this ineffectiveness, he has pointed out that written corrective feedback is not compatible with SLA theories that acquisition of the forms and structures of writing is a gradual and complex process. Taking this strong position, he argued that feedback is harmful and should be abolished because the act of written corrective feedback would take time and energy away from more important aspects in writing classes. He claimed teachers can avoid the harm by doing nothing. In a response to Ferris (1999) which takes a strong position in the opposite direction, Truscott (1999) refuted the assertion that giving written grammar corrections is generally beneficial and concluded that it would be ineffective in improving students’ writing in L2. However, he did acknowledge that it would be premature to conclude error correction can never be beneficial under any conditions.

To Truscott’s (1999) controversial claims, Ferris (1999) argued that written error corrections can help improve students’ writing, claiming the evidence Truscott cited for his argument was not necessarily complete. In a later paper, Ferris (2004) introduced several studies which found positive effects of written error corrections, and argued that SLA research also predicts its positive effects, referring to the beneficial effect of Focus on Form. She
suggests that learners need to have their errors made salient and explicit so that they can continue to develop linguistic competence avoiding fossilization. Although their positions are totally different, Ferris (2004) agrees with Truscott (1999) that more systematic carefully designed longitudinal studies are needed since existing evidence is not conclusive but suggestive.

2.3.3 Students’ View of Feedback

In considering the effects of written feedback, students’ views of error correction from an affective standpoint should be examined, though students are not always the best judges of what they need most (Ferris, 2010). Ferris (1999, 2010) argues that L2 student writers consistently value error feedback from their teachers to improve their writing. By using a triangulation method with questionnaires and interviews, Nugrahenny (2007) examined attitudes toward teacher written feedback by Indonesian students who were taking English writing classes. The study revealed that of the 100 students examined 93% of them considered teacher feedback as either important (49%) or very important (44%). In addition, it was found that students prefer feedback focused on language or form rather than feedback on contents. Saito (1994) investigated ESL learners’ preference for teachers’ written feedback. In the study, thirty-nine students with different L1 backgrounds (e.g., Arabic, Japanese, Farsi, Korean, Chinese, French, Swedish) in ESL intensive courses and an ESL engineering writing class were asked to fill out a questionnaire. The results showed that ESL students preferred teacher feedback and they found teacher feedback most useful when it focused precisely on grammatical errors. Published previous studies, in general, showed learners’ as well as teachers’ preference for written corrective feedback especially on form (e.g., Nugrahenny, 2007).
2.3.4 Trade-offs in Writing

Skehan (1996) points out that there are three aspects of production: accuracy, fluency and complexity. Accuracy is defined by Skehan (1996) as the extent to which the target language is produced in relation to the rule system and how well the learner can handle whatever level of interlanguage complexity he/she has achieved. Ellis (1987, 2003) mentions that accuracy requires syntactic processing with the availability of planning time. Fluency refers to learners’ ability to mobilize their system to communicate meaning in real time, prioritizing meaning over form, and is achieved when learners can exercise strategies to avoid or solve problems quickly (Ellis, 2003). Complexity is defined as the extent to which elaborate structured interlanguage is utilized (Skehan, 1996). In writing, referring to previous studies (e.g., Ellis, 1987, 2003; Skehan, 1996), it can be argued that: accuracy concerns how precisely the learner can write what he/she wants to write; fluency is likely to be indicated by a high rate of writing; complexity concerns to what extent the language produced is elaborate (Hunt, 1970; Tong-Frederics, 1984; Sato, 2008).

As for the relation between accuracy, fluency and complexity, Ellis (2003) argues that there could be trade-offs in L2 learners’ production, meaning that when L2 learners attend to accuracy in their writing, it interferes with their ability to conceptualize, formulate, and articulate messages, preventing them from showing fluency. Skehan and Foster (1999) argue that in general fluency may be accompanied by either accuracy or complexity but not both, referring to trade-offs in performance due to learners’ limited attentional resources. However, there also is a contrasting view. For example, Robinson (2001) previously claimed that learners can access multiple attentional resources.

As the effects of written corrective feedback on the relation of the three aspects have not yet been fully examined, further study is needed.
2.3.5 Effects of Written Recasts

Written corrective feedback can be categorized as direct or indirect (e.g., Bitchener & Knoch, 2010; Ellis et al., 2008). Direct correction is referred to as provision of the correct target language form to learners’ errors, and indirect correction is defined as indications of learners’ errors in some way, such as underlining, circling and coded symbols, which encourages learners to self-correct their errors (Ellis et al., 2008). Written recasts, as they provide models or correct forms, can be regarded as direct correction. However, if learners do not notice their corrective intentions, written recasts cannot be either direct or indirect corrective feedback. From this point we could argue that written recasts are either direct correction or non-corrective feedback (e.g., conformation, paraphrase or comment).

Ayoun (2001) examined the effectiveness of written recasts by comparing it with modeling (pre-emptive positive evidence) and grammatical instruction (explicit positive evidence and negative feedback). In the study, in testing the effectiveness of the three conditions, the acquisition of the aspectual distinction between the past tense in French was used, and the recasts were given as implicit negative evidence. Post-test results revealed written recasts were significantly more effective than grammatical instruction, but not modeling. Although written recasts could have served as implicit positive evidence in some cases, it was concluded that the result partially supported recasting as the most effective form of feedback. In the follow up study, analyzing the mixed complicated results, Ayoun (2004) concluded that the acquisition of subtle and complex structures requires both implicit negative feedback such as recasts and explicit negative feedback as provided by traditional grammar.

2.3.6 Comparison of Written Recasts with Oral Recasts

Philp (2003) pointed out the limitations of working memory as one of the factors which hinder the beneficial effect of recasts. Recasts in the form of oral corrective feedback demand
an immediate cognitive comparison also requiring learners to be dependent on short-term memory. In the study which compared the effects of face to face communication and computer-mediated communication on L2 development, Payne and Whitney (2002) found greater improvements in oral proficiency in the post-test for learners who were in the computer-communication group than those in the face to face communication group. They interpreted that computer-mediated communication supported students who were less able to maintain oral information in memory: Interlocutors’ feedback was less fleeting as learners were able to trace it by reading. Williams (1999) also suggested that if cognitive comparison is not overtly taxing learners’ attentional resources, learners with lower working memory would benefit in feedback. As written feedback is delayed and imposes less cognitive demand without requiring immediate on-line cognitive comparison—as in the case of oral feedback—we could assume that written recasts would be better noticed by learners leading them to L2 development than recasts provided as oral feedback.

2.4 Self-initiated Self-repair

2.4.1 Importance of Self-initiated Self-repair in the Japanese EFL Classroom

Errors naturally appear in spontaneous speeches and conversations. Especially in a second or foreign language, it is only natural that mistakes happen as a part of the learning process. After an inappropriate expression is detected, it can be corrected. This act of correcting can be initiated either by the speaker (non-native speaker) or the recipient. The former is termed as self-initiated, while the latter as other-initiated (Schegloff, Jefferson, & Sacks, 1977). Occasionally, non-native speakers (NNSs) correct or modify their output to make it more comprehensible after they detect an insufficient previous utterance. This phenomenon is referred to in second language acquisition (SLA) research as self-initiated self-completed repair (Kasper, 1985). In Japanese junior or senior high schools, classes average around 40
students, making it practically impossible for teachers to have frequent one-on-one interactions providing students with corrective feedback. Thus, in many cases, students are left to converse with other students in the L2, being asked to perform communicative activities without direct oversight of the teacher. In this situation, students are ideally expected to provide their partners with feedback or to notice their own insufficient utterances in order to carry out self-initiated self-repair.

2.4.2 Definitions and Studies on Self-initiated Self-repair

In the contexts of NS/NNS and NNS/NNS interactions, L2 learners attempt to modify their erroneous or insufficient utterances in the direction of more comprehensible output: the learner him/herself realizes the trouble source (a trigger) and reacts to it by trying to repair it (Kasper, 1985). The following is an excerpt of a self-initiated, self-repair extracted from Sato (2012a).

I go ...um went to his house yesterday.
(trigger ) (self-initiated part) (self-repair)

The student detected that the form of the output (go) was erroneous, stopped the speech flow, and finally corrected the error. Shehadeh (2001) examined and compared the effects of their initiation and self-initiation with adult L2 learners in an interactive task (picture description, opinion exchange, and decision making) and found that learners produced more modified output after self-initiation. He concluded that self-initiations have a crucial role in promoting modified output. Kormos (1999) suggested that self-repair may serve in the same way as uptake (a move taken by the NNS in response to the feedback given to his/her previous utterance). She explained that as it is a part of a mechanism that promotes pushed
output, self-repair expands the learners’ linguistic repertoire. Kasper (1985) investigated negotiated information between a NS and an NNS, as well as NNS/NNS exchanges, and concluded that self-initiated self-completed repair is more important than other-initiated other-completed repair for successful language learning. According to Schegloff, Jefferson, and Sacks (1977), self-initiated repair may occur within the same utterance turn, immediately after the end of the turn, or in a subsequent turn. Schegloff (1979) concluded that “self-initiation, same turn repair is the most common and most successful” (p. 268). However, empirical research shows that learners do not correct every mistake they have made and that they correct not only linguistic (phonological, lexical, syntactic) errors but also pragmatically inappropriate utterances and inadequate information. In a study of NS/NS interaction, Schegloff et al. (1977) observed that repairs focused more on content and pragmatic errors than on linguistic errors. Kasper (1985) found that in an NS/advanced NNS interaction, the majority of repairs focused on content and pragmatic repairs rather than linguistic repairs. As for the effects of learners’ English proficiency on the occurrence and the success of self-initiated self-repair, Lyster and Ranta (1997) noted that only when learners have acquired an adequate level of English proficiency is self-initiated self-repair feasible.

The timing of self-correction according to the types of triggers has been researched (e.g., Kormos, 2000; Van Hest, 1996): the occurrences of self-initiated repair according to the different task conditions learner are engaged in are researched, for example, in Shehadeh (2001). In terms of uptake or success rate, studies on recasts are conducted (e.g., Sato, 2009; Kim & Han, 2007; Trofimovich, Ammar, & Gatbonton, 2007; Philp, 2003). However, the effects of types of triggers on the occurrences or uptake of self-repair is rarely researched especially in the Japanese EFL environment, indicating the need for further study in the EFL situation in Japan.


Chapter 3
Examining the Effectiveness of Recast for Japanese High School Students
with low English Proficiency

In this chapter, the study, which examined the effectiveness of recasts on low-level learners, is reported. The study (Sato, 2006) also observed and analyzed how the teacher provided recasts to students.

3.1 Study 1: Examining the Effectiveness of Recasts for Japanese High School Students
3.1.1 Purpose of the Study
Lyster (1998) examined the role of recasts in his study with French immersion classrooms at the primary level, and found that the teachers did not consistently use recasts for corrective purposes and they sometimes used recasts in reaction to student’s accurate use of L2. He has concluded that students are unlikely to be given recasts just for corrective purposes. The purposes of the study (Sato, 2006) are to examine how effectively recasts are provided by teachers and to how effectively recasts are noticed by low-level learners resulting in repair. Discussing possible factors which may constrain the acquisition effect of recasts, so that we could suggest some possible ways to overcome problems, is also a purpose of the study.

3.1.2 Method
3.1.2.1 Participants
The participants in this experimental study were 38 second-year students (20 males and 18 females) at a public high school in Hokkaido whose academic level was relatively low.
Students were divided into two groups in such a way that there was no overall difference in English ability between the groups (Group A, \( n = 18 \), Group B, \( n = 20 \)). Their English teacher, who was also a homeroom teacher, conducted this grouping and made pairs after careful consideration so that the students could easily perform the communicative activities with their partners: Group A consisted of 9 pairs and Group B, 10 pairs.

### 3.1.2.2 Procedure

Three activities, namely, play-acting, a skeleton dialogue, and an interview, which are typical and traditional activities widely found in many textbooks authorized by the Japanese government, were developed for this study. In play-acting activities students are usually required to practice and learn the role by heart to perform the model dialogue. Students in this study were given the direction that if they had not been able to memorize all the words or had forgotten what they had memorized during the dialogue, they should use their own words or expressions which could serve to continue the conversation (see Appendix A).

In the skeleton dialogue activity, students were required to fill in the blanks of the model dialogue. They were given time for preparation. Livingstone (1983) explains, “skeleton dialogues gives a very limited choice and can be used where the situation and function are concrete” (p. 53), but for the current study a traditional skeleton dialogue activity was developed so that students would have real communication or interaction. That is, students were required to continue conversation freely about the topic (see Appendix B). In the interview activity, students were asked to be an interviewer and to interview somebody using the target form and take notes. They were also required to obtain some information from interviewees and then to continue the conversation freely (see Appendix C). In the activities, the main focus was on free conversation. The communicative activities had been pilot-tested by three high school teachers with 16 years’ experience of teaching, and by using their
feedback some revisions were made so that students would have no difficulty with the activities.

Group A performed the activities on the first day of the experimental class and Group B the second day. During the activities the teacher participated in the activities of each pair at least once to provide students with feedback (recasts) and more interaction. The teacher took part in the part of free conversation of the skeleton dialogue and the interview activities. All of her utterances were tape-recorded. Each of the tape-recoded activity was transcribed for analysis, totaling 70 min of 24 discourses. Transcriptions were re-checked to ensure their accuracy and in a limited number of cases where there were still unsolved transcriptions difficulties the original participants were invited to interpret. After the experimental class, a retrospective interview was conducted with the teacher, and students wrote a review for the activities.

### 3.1.3 Results and Discussion

Previous studies implied that interaction between the teacher and learners in the current study would have a facilitating effect for acquisition if sufficient recasts were provided. However, in the current study, the teacher’s recasts were not as effective as we had expected. Examples of conversations in which recasts were ineffective will be discussed here. (Note: Italics are recasts)

On some occasions recasts were not appropriately given for corrective purpose:

1. S: I don’t have many friends.
   
   T: *Oh, you don’t have a lot of friends.*

2. T: What had you been doing before you entered this high school?
S: Everyday is sleeping.
T: Oh, you were, every day?
S: Yes. Every day is sleeping.
T. I cannot believe that.

In these examples, recasts were not appropriately given. In example 1, the purpose of the recast was not to let the student notice and correct the previous utterance but to indicate the teacher’s emotion (surprise). In example 2, she showed her surprise in using a recast without any corrective purpose.\(^1\) She should have, at least, given the recast just after the student’s second use of “Every day is sleeping.” During the activities totally 49 recasts were given to students, and 12 of them (24\%) found out to be inappropriate, or without corrective purpose. The results are compatible with Lyster (1998) which has concluded that recasts are often given to students for non-corrective purposes.

Table 3.1: The number of recasts, with or without corrective purpose

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Recast without corrective purpose</td>
<td>12 (24%)</td>
</tr>
<tr>
<td>Recast with corrective purpose</td>
<td>37 (76%)</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
</tr>
</tbody>
</table>

In many cases, recasts with corrective purpose were not noticed by students.

3. Student: I been reading a book.

\(^1\) These interpretations were confirmed by the interview with the teacher.
Teacher: *Oh, you have been reading a book?*

S: Yes, reading a book. And I ….

4. T: What had you been like before you entered this high school?

S: I had been sleep.

T: *Sleeping?*

S: Yes. I had been sleep. I like sleep.

In these examples, the teacher made attempts, by giving recasts, to make students notice the erroneous utterances in order to correct them, but in fact the students did not notice them and continued their conversations. In the activities of the study, many recasts were given to students, most of which were not actually noticed by them, and the teacher and student kept the conversation going. In the study conducted by Lyster and Ranta (1997), it was reported that only 18% of teacher recasts were immediately noticed and followed by a student repair. They argued that recasts were not as effective as other types of feedback, such as clarification requests, repetition, metalinguistic feedback and elicitation in eliciting student-generated repair. In the current study, among 37 recasts with corrective purpose, only 9 were followed by students’ repair (16%). One potential reason that students did not notice recasts is that students in the study were not yet ready to notice them to repair their errors or mistakes. Previous research suggests that only more proficient learners may benefit from recasts (e.g., VanPatten, 1996; Philp, 2003). As a related issue of readiness, Farrar (1990) found in his study that recasts were especially effective at a certain stage in the child’s development of morphemes but were not effective prior to the stage that they were cognitively ready, and has claimed that linguistic readiness is a determining factor in benefiting from recasts. Philp (2003) argues that in terms of processing mechanism and prior knowledge, readiness may
modulate noticing, and also says that learners tend not to notice input that is beyond their level of acquisition. For the students in the current study, noticing recasts to repair previous utterances may have been beyond their English level. The fact that 27 students answered, in a reviewing paper, that they had difficulty understanding what the teacher’s recasts meant confirms this.

Table 3.2 : Outcome of recast

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair</td>
<td>9 (16%)</td>
</tr>
<tr>
<td>Needs-repair</td>
<td>28 (76%)</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
</tr>
</tbody>
</table>

There seems to be another factor which constrained effectiveness of recasts. The following are examples in which a recast was noticed but was not successful in making the student correct her previous utterance.

4. S: I been lazy (mispronounced) when junior high school.
   T: Oh, you had been lazy (corrected) when you were in Junior high.
   S: Lazy (corrected) in junior school.

In Example 4, the student noticed her phonological error and corrected it but was not able to correct her morphosyntactic error.

5. T: What had you been doing before I entered the room?
   S: I had speaking my friend.
   T: Oh, you had been talking with your friend.
S: Yes, talking friend.

Examples 4 and 5 are situations when recasts were noticed. Nonetheless, we feel that the effects of recasts were incomplete because students noticed only one error and corrected it without noticing the other errors or mistakes. In these examples, the teacher’s recasts were long and there were several differences between the recasts and the students’ original utterances. Philp (2003) points out that the length of recasts and the degree of difference are factors that may critically affect noticing. The length of recasts may exceed learners’ limits of temporary phonological store, and as a result recasts may be less accurately recalled (Philp 2003). As for recasts that are too different from the learners’ original utterance as we observed in examples 3 and 4, they are less likely to be imitated as they are too far removed from the original versions (Long, 1996). In the current study, among 37 recasts with corrective purpose, 14 recasts were with more than two changes from students’ original utterances, and among 9 successful well-formed students’ output, only 2 of them were after recasts with more than two changes.

Table 3.3: Recasts with corrective purpose, number of changes

| Recast with more than two changes from students’ original utterances | 14 (38%) |
| Recast with one change from students’ original utterances | 23 (62%) |
| Total | 37 |

As we have discussed so far, recasts given in teacher-student interaction were not so effective as we had expected for students’ L2 acquisition in this study. The lack of significant
advantages of recasts may be due to the lack of student readiness, the length of recasts and degree of differences between students’ original utterances and recasts, and inadequacy of the recasts themselves for corrective purposes.

3.2 Summary of Chapter 3

Qualitative analysis of students’ utterances with a teacher has pedagogical implications. In the activities in which a teacher participated, she provided 49 recasts to students. However, as 12 of them were without corrective purpose, we can safely say those recasts were inappropriate and ineffective for acquisition. In real conversational situations we may give recasts without the purpose of encouraging learners to correct their interlanguage, but in English teaching situations this is not beneficial for acquisition. We suggest that all recasts should have corrective purpose to give a clue of learners’ errors and mistakes, otherwise learners would not notice recasts even when they really have corrective purpose.

Among 37 recasts aiming at letting learners notice their mistakes 14 of them had more than two changes from students’ original utterances. When we think of the fact that only 2 of them led learners’ repair, long recasts with more than two changes from students’ original utterances did not work effectively. Hence we argue that teachers should be well trained to provide recasts effectively. The results of the study revealed recasts had, in many cases, gone unnoticed or had been neglected. We assume recasts are not so effective for low-level learners as the students in this study. However, if we take into consideration a number of previous studies documenting significant advantages of recasts for learners, with a little thought we could make recasts more effective. We suggest that teachers should be careful in their choice of words for recasts, taking account of the students’ proficiency. Considering students’ limitations of working memory, we should give recasts that are more concise, familiar and plain so that students do not have difficulty in noticing and retaining them to repair.
Additionally, in giving recasts, we should use techniques such as changing the tone of voice, using facial expressions, adding a pause, or whatever measures may prompt students to notice errors or mistakes. As it seems difficult for non-proficient learners to notice recasts, teachers’ well-considered techniques are inevitable.
In the last chapter, Sato (2006) reported the effects of recasts on low-level Japanese learners of English without high motivation toward learning English. In the study it was revealed that recasts were not very effective and were provided inefficiently by a Japanese teacher. As previous research indicates that recasts are more helpful for high and intermediate learners than for low-level learners (e.g., Philp, 2003), it is necessary to investigate the effects of recasts not only on low-level Japanese learners but also on intermediate ones. This chapter reports three studies which examined the effects of recasts on intermediate high school learners, most of whom are college bound.

4.1 Study 2: Considering the Effectiveness of Recasts on Japanese High School Learners’ Learning

4.1.1 Purpose of the Study

This study (Sato, 2009a) examines the effects of recasts according to the error type, the degree of difference between students’ initial utterances and the recasts, and the number of morphemes of recasts. This was motivated by previous studies which found some relationship of those factors with the effects of recasts (Lyster, 1998b; Philp, 2003; Sato, 2006). This study is designed to examine: How effective are recasts for intermediate high school students according to error types? (RQ1); the degree of differences? (RQ2); length? (RQ3)
4.1.2 Method

4.1.2.1 Context of the Study and Participants

In Japan, English has long been taught as a knowledge-based subject and, for many students, passing of knowledge-based exams is the primary objective. Japanese students seem to have dual orientations for learning English: a practical, realistic goal related to examinations and grades, and a vague idealistic goal related to using English for international or intercultural communication (Yashima, 2000). It seems that most students have the former type of motivation (related to tests) more than the latter (related to communication) in the Japanese EFL situation (Yashima, Zenuk-Nishide, & Shimizu, 2004).

The participants of the study were: a native English teacher from Australia who had been teaching English as an assistant language teacher (ALT) for five and a half years in Japan; 32 second-grade college bound Japanese high school students (15 males and 17 females, aged 16 or 17). In the curriculum, the students were taking a general English II course and a writing course. Four English II classes and two writing classes were conducted in a week. A Japanese teacher taught all of the classes except one writing class which was taught by her and the ALT together, once in two weeks. In the writing class, students were engaged in communicative activities and tasks as well as writing activities. All of the students had passed the entrance exams for the academically higher level high school with relatively high scores in English. In the questionnaire conducted just before the study, 28 out of 32 students (88%) answered that they liked the communicative English classes taught by the ALT. Thus, we regarded them as intermediated students with relatively high motivation toward learning English.

4.1.2.2 Procedure

The English class for the study was not a formal teacher-centered class but was instead a series of interview tests of students, conducted by the ALT, David (this name is fictitious). In
the interview, David and a student had a free conversation, which mainly took the form of David asking questions and the student answering about his/her daily life covering topics such as hobbies, study, family, future dreams and so on. There were no target structures for the study as this was a natural communication-based task. David had told students to do their best to communicate clearly and said he would evaluate students’ English performances. David knew that their interactions would be recorded but did not know the purposes of the study. He had not been given any instruction on which types of feedback should be given to students. All recordings were transcribed and re-checked by the researcher to ensure their accuracy. Additionally, in a limited number of cases where there were still unsolved transcription difficulties, the original participants were invited to interpret. The database includes 32 interviews totaling 362 minutes.

4.1.2.3 Data Analysis

4.1.2.3.1 Error Types

Student errors to which recasts were given were categorized as grammatical errors, lexical errors, phonological errors and unsolicited uses of Japanese, following Lyster and Ranta (1997): (1) Grammatical errors are errors in the use or lack of determiners, particles, verb forms, word order; (2) Lexical errors include inappropriate, imprecise or inaccurate choices of lexical items; (3) Phonological errors address inappropriate, imprecise or inaccurate pronunciation; (4) Unsolicited use of Japanese is an instance where a student speaks Japanese instead of English. In cases where a student produced an utterance with more than one type of error, we coded it as the error type on which the recast focused. The following are examples according to error types.
Example 1 Grammatical recast.

Students 1: I go to Okinawa two years ago.

David: Oh, you went to Okinawa before. ←recast

Student 1: I was very happy. (Failed)

Student 1 failed to repair the utterance after David’s grammatical recast, and was therefore coded as “Failed”. In Example 2, student 2 succeeded in producing a repaired utterance and was coded as “Successful”.

Example 2 Lexical recast.

S2: I will drink, drink medicine.

D: Yes. You will take medicine. ←recast

S2: Oh, Yes. Yes. Take medicine. (Successful)

In the following examples, students successfully responded to recasts.

Example 3 Phonological recast

S3: I had a headache (mispronounced as /hedeitʃ/)

D: Oh, you had a headache. ←recast
S3: Yes. Headache (pronounced correctly) headache. (Successful)

Example 4 Recast to unsolicited use of L1

S4: I want to be a… Kango- si?

D: Oh, you want to be a nurse. ←recast

S4: Yes, I want to be a nurse, nurse. (Successful)

Although students’ unsolicited use of their L1 may not be erroneous, it is crucial for them to communicate without using Japanese. A response from the teacher can be interpreted as an explicit correction, but it is still corrective feedback changing only the use of the L1 without changing the speaker’s central meaning. Thus, this type of feedback was regarded as a recast in this study.

4.1.2.3.2 Degree of Difference

To examine the effects of the degree of difference between the learner’s initial utterance and the recast, the number of changes was counted and coded following Philp (2003), but for the study, recasts were divided into two categories according to whether the recast had only a single change or more than one change. This decision was made referring to Sato (2006) which revealed that recasts with more than one change were less likely to be noticed by the learners. Conversion of the subject was not counted as a change and inversion counted as one change. Recasts in Examples 2 to 5 were counted as a single change, and the recast in Example 5 was coded as two changes (were, playing).
Example 5

S5: I… I’m … play baseball last year.

D: OK, you were playing baseball last year. ←recast

S5: … (silence) … Yes. I play… (Failed)

4.1.2.3.3 Lengths

Recasts were also categorized into long or short ones according to the number of morphemes, based on Philp (2003): recasts with more than five morphemes were coded as long. Example 6 was coded as short and Example 7, long.

Example 6

S6: I eat it.

D: Oh, you ate it. ←recast

S6: Yes, I ate it. (Successful)

Example 7

S7: I didn’t know… what… should I do… study.

D: OK, you didn’t know what you should study then. ←recast

S7: … (silence)… I … lazy… (failed)
4.1.2.4 Issues in Analyzing the Effectiveness of Recasts

In analyzing the results, some crucial issues emerged that could affect the interpretation of the effects of recasting. Previous studies counted learners’ correct reformulation of an error occurring immediately after recasts as a repair in measuring the effectiveness of recasts (e.g., Lyster, 1998b; Lyster & Ranta, 1997; Sato 2006). However, this measurement should be reconsidered. Long (2006) mentions that recasts do not always have immediate corrective effects and that learners’ immediate reproduction after recasts is unreliable as an indication of learning since it might be just a “language-like” behavior (p.99). He introduces Mackey and Philp (1998), which showed that the existence of immediate response to feedback was not an indication of learning, and also that the absence of an immediate response did not mean learning had not occurred. This argument is convincing. Practicing teachers know that learners are more likely to respond immediately after teachers’ models—if they are well trained to do so—and that some learners can learn without responding to teachers.

4.1.2.4.1 Acknowledgement

We found that in many cases (14 instances) students just responded to recasts by saying “yes,” “mm”, or nodding. The interview test conducted by David definitely had a pedagogical purpose requiring students to speak correctly, but the test itself was meaning-focused interaction. We could assume that some students may have hesitated to produce repair because this would interrupt the flow of the conversation or simply be unnatural. As long as it is not elicitation feedback such as a clarification request, some students may have assumed it was unnecessary to modify their initial utterances, as it was more appropriate for them to simply acknowledge recasts to continue the conversation (Sato & Lyster, 2007). When students acknowledged, they may not have known which part of their utterance was wrong, but at least they must have learned that their utterance was incorrect (Kim & Han, 2007). As is mentioned
in Chapter 2, repair can be “evidence that learners are noticing the feedback” (Lightbown, 2000, p. 447), but the absence of a repair does not mean learners’ noticing has not occurred.

4.1.2.4.2 Later Incorporation

In seven cases, students produced a reformulated version of their errors, not just after recasts but in later turns which they self-initiated to produce correct forms. This type of self-initiated, modified repair, which came several turns after recasts in the current study, should be regarded as optimal for acquisition because of the reasons mentioned in Chapter 2. Thus, we may have to code students’ later incorporation as successful uptake.

4.1.2.4.3 No Opportunity

In interactions between David and the students, 142 recasts were recorded, among which 43 (30%) did not provide students with opportunities to respond. In these instances David continued to speak after providing recasts, leaving no opportunity for students to show repair. The following is an example.

Example 8

S8: I play violin in junior high school.

D: You played the violin. OK. Was it difficult?

↑ (No opportunity)

This phenomena has been reported previously, both in laboratory and classroom settings (e.g., Loewen & Philp, 2006; Oliver, 1995; Sato, 2006; Zhao & Bitchener, 2007). However, as Zhao and Bitchener (2007) claim, this “no repair” may not mean that students did not really
understand the feedback provided as recasts in the current study. We could assume, as Oliver (1995) has argued, if students had been given the opportunity to respond, some of them could have done so successfully.

4.1.2.4.4 Preferred Recast

It has been reported that teachers tend to use non-corrective repetition in teacher-student interaction (e.g., Lyster, 1998a; Sato, 2006) to show, for example, acceptance, approval or confirmation (Lyster, 1998a). These non-corrective repetitions were not counted as recasts since they did not include rephrasing or changing of students’ utterances. However, a very similar phenomenon which could reduce the salience of “real corrective recasts” was reported in the study. On many occasions (40 instances were reported), David responded to students’ correct forms by providing recasts to show his preferences or to “edit discourse” (Mohan & Beckett, 2001, p.138 as cited in Long, 2006). In the current study, we decided to use the term “preferred recast” which showed David’s preference or inclination. The following is an example of a preferred recast

Example 9

S9: I like singing.

D: Oh, you like to sing.

In the current study, students did not show repair after preferred recasts. They only acknowledged the recast 13 times by saying “yes” or nodding; while 8 times they did not notice or ignored the recasts. In four cases, students responded by ill-formed output, as
Example 10 shows.

Example 10

S10: I want to learn knowledge about history.

D: You want to be knowledgeable about history. (preferred recast)

S10: … No, no. I’m not.

D: OK, so…

In the example, the student could not understand David’s preferred recast and seemed to have been confused. In the rest of the cases of preferred recasts, opportunities to respond were not given.

4.1.2.5 Measuring the Effectiveness of Recasts

Taking into account the issues mentioned, a criterion was set up in measuring the effectiveness of recasts. When students acknowledged recasts, they served as comprehensible input because students’ acknowledgement indicates their understanding of recasts given. In this situation, recasts were effective, at the least, at the level of comprehension. Acknowledgement moves should be regarded as potential evidence of the effectiveness of a recast for L2 learning (Zhao & Bitchener, 2007). In the case of students’ repair in later turns, this is more overt indication of incorporation. When students are not given the opportunity to respond to recasts they consequently cannot do so. When they are given recasts to their correct utterances, students do not have to reformulate their original utterances. The
measurement to examine the effectiveness of recasts taken was: “no opportunity” and “preferred recasts” were not included in the denominator; “later incorporation” and “acknowledgement” were included in the numerator, meaning that they were coded as successful.

Students produced 142 erroneous utterances which were given recasts by David. The two raters coded 20% (28) of total recasts to classify them according to error types, the number of changes, and the number of morphemes. Agreement on the coding was 25 out of 28 (89%). We considered that inter-rater agreement was high enough for the first rater to continue coding. In the situation when students’ errors included more than one error type and recasts included more than one change with more than one error type, we excluded them from analysis. There were only four instances like this and David did not give learners opportunities to respond to his recast.

4.1.3 Results

We recorded 20 repairs, 14 times of “acknowledgement”, 7 times of “later incorporation”, 43 times of “no opportunity” and 40 “preferred recasts”. The calculation conducted was: \( \frac{20 + 14 + 7}{142 - 43 - 40} = 69\% \). A chi-square statistic was computed, which proved there was significant difference between the numbers of successful moves (41) and unsuccessful moves (18) \( (\chi^2 = 8.96, \text{df} = 1, p < .05) \). The term “success rate” may not be the best one to use here, as acknowledgement may not always show the effectiveness of recasts, and the degree to which recasts have enhanced learning can differ by the three moves (i.e., repair, later incorporation, and acknowledgement). However, the term is meaningful enough to distinguish the three moves from failures (i.e., recasts ignored or unnoticed), so it was decided to use it for the study.
4.1.3.1 Error Types: How Effective are Recasts for Intermediate High School Students According to Error Types? (RQ1)

Table 4.1 presents the number of recasts, successful moves and success rates according to error types. Recasts were given mostly to students’ grammatical errors followed by lexical errors, phonological errors, and their unsolicited use of Japanese. The rate of success was highest with students’ L1 use followed by lexical errors, phonological errors, and the rate of success with grammatical errors was found to be the lowest.

Table 4.1: Number of recasts, successful moves and success rate by error type

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Acknowledgement</th>
<th>Later incorporation</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar</td>
<td>29</td>
<td>5</td>
<td>9</td>
<td>4</td>
<td>62 %</td>
</tr>
<tr>
<td>Lexical</td>
<td>13</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>77 %</td>
</tr>
<tr>
<td>Phonological</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>70 %</td>
</tr>
<tr>
<td>L1</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>86 %</td>
</tr>
</tbody>
</table>

4.1.3.2 Degree of Difference: How Effective are Recasts for Intermediate High School Students According to the Degree of Differences? (RQ2)

Table 4.2 shows the number of recasts with one difference, more than one difference between the learner’s initial utterance, and successful moves. The results revealed that recasts with only a single change led students to successful moves better than recasts with more than one change. The acknowledgement move was more frequent and later incorporation was less with recasts having more than one change than with recasts having only a single change.
Table 4.2: Number of recasts, successful moves and success rate by degree of change

<table>
<thead>
<tr>
<th>Differences</th>
<th>Recast</th>
<th>Repair</th>
<th>Acknowledgement</th>
<th>Later incorporation</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>One change</td>
<td>33</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>79%</td>
</tr>
<tr>
<td>More than one change</td>
<td>26</td>
<td>5</td>
<td>9</td>
<td>1</td>
<td>58%</td>
</tr>
</tbody>
</table>

4.1.3.3 Length: How Effective are Recasts for Intermediate High School Students According to Length (RQ3)

Table 4.3 shows the number of short recasts with 5 morphemes or less and long recasts with more than 5 morphemes, and successful moves. The distribution of long recasts was very low (10%). Although the result showed a higher success rate of long recasts, neither repair nor later incorporation was recorded. A successful move was confirmed only by acknowledgement.

Table 4.3: Number of recasts, successful moves and success rates by length of recast

<table>
<thead>
<tr>
<th>Length</th>
<th>Recast</th>
<th>Repair</th>
<th>Acknowledgement</th>
<th>Later incorporation</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short</td>
<td>53</td>
<td>20</td>
<td>8</td>
<td>7</td>
<td>66%</td>
</tr>
<tr>
<td>Long</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.1.4 Discussion

In general, the results imply that recasts can facilitate learning, considering the high success rate (69%). Statistically, a successful move was more frequent than a failed move. However, some factors appeared to have impacted on the effectiveness of recasts. First, error types were revealed to have affected both the distribution and the effectiveness of recasts, as summarized in the following:
Distribution of recasts:

Grammar (49%) > Lexical (22%) > Phonological (17%) > L1 (12%)

Success rate:

L1 (86%) > Lexical (77%) > Phonological (70%) > Grammar (62%)

David provided recasts more frequently to students’ grammatical errors than to any other error types, which is similar to previous studies (e.g., Kim & Han, 2007; Lyster, 1998b; Lyster & Ranta, 1997; Oliver, 1995; Zyzik, & Polio, 2008). In this study, neither the total number of students’ errors by type nor other types of feedback produced by David were addressed, so the interpretation of David’s preference for recasting with grammatical errors is a matter of speculation. However, referring to the results reported earlier (e.g., Lyster, 1998b; Lyster & Ranta, 1997), we could assume that David might have felt it appropriate to recast grammatical errors because modifying students’ grammatical knowledge through negotiation of form requires modifying complex system-driven rules. We could also assume that in the Japanese grammatical accuracy-oriented English classroom, he might have felt it important to address grammatical correctness. Despite this, the success rate in grammar was the lowest, which is generally consistent with previous studies (e.g., Kim & Han, 2007; Trofimovich, Ammar, & Gatbonton, 2007; Williams, 1999). Trofimovich et al. (2007) found that higher proficiency learners benefited from recasts more than lower proficiency learners. They suggest that in order to notice their own errors through recasts and to reformulate them after recasts, students should already have knowledge of the form. In this study, some students must have lacked the explicit knowledge to benefit from the enhancing effect of recasts. Learners’ explicit knowledge can be a precondition to respond to recasts directed at
grammatical errors successfully, whether their response is in the form of immediate repair, acknowledgement, or later incorporation. That is to say, students should have knowledge about the target form, especially in showing immediate and later repair. Just to acknowledge recasts may not require this deeper knowledge, a comprehension level may be sufficient. The fact that among total success moves (18), acknowledgement was the most frequent move (9, 50%) implies that recasts directed at grammatical errors had a less enhancing effect than recasts directed at other types of errors.

Recasts addressed at students’ L1 led to the highest rate of immediate repair or later self-repair. This is explained by the salience of the recast and the cognitive process students experienced when they decided to speak Japanese followed by the English equivalent (recast). As feedback was given immediately after students found interlanguage deficiencies, they could easily understand the corrective purpose of the recast, leading them to produce what they had wanted to say. Recasts were provided exactly when needed, as positive evidence. Without a doubt we can assume this “right thing done at the right time” approach enhanced learning.

The results revealed that recasts of lexical and phonological errors were noticed more by the students, showing they had greater effectiveness than those directed at grammatical errors, which is consistent with previous studies (e.g., Kim & Han, 2007; Oliver, 1995). The tendency of learners to concentrate on lexical meaning rather than on form, as research on interaction has shown (e.g., Williams, 1999; Zhao & Bitchener, 2007), was confirmed in the study. Trofimovich et al. (2007) found that learners were more likely to detect lexical errors than grammatical errors when they received recasts. In this study, as was observed in Egi (2007), students were more likely to interpret lexical recasts as corrective positive evidence than when provided with grammatical recasts.

The slightly higher success rate of phonological recasts than grammatical recasts may be
attributable to their salience and unequivocalness (Lyster, 1998b). A recast given immediately after an incorrect pronunciation clearly conveyed its corrective purpose, showing a model without requiring cognitive readiness. We could assume that in some cases students only had to imitate or repeat David’s pronunciation, even when they did not have any knowledge to correct phonological errors. In addition, David, who had been teaching in Japan for years and did not have difficulty in understanding students’ Japanese-accented pronunciation, provided phonological recasts only when the students made serious errors. This behavior of his must have made the recasts more salient.

As for the effects of recasts, judging by the difference between learners’ utterances and recasts, the results supported Philp (2003) who mentioned that recasts closer to learners’ utterances may be more beneficial to learners. The fact that later incorporation, which requires a complicated cognitive process such as hypothesis testing, was reported only once after multiple-change recasts, but six times after single-change recasts also shows the more conducive effect of single-change recasts compared to multiple-change recasts.

In interpreting the effects by length, we decided just to look at repair and later incorporation excluding acknowledgement because the total number of long recasts (more than five morphemes) was very small, and all of the successful moves after long recasts were acknowledgements automatically producing a 100 % success rate. The reason that students failed to repair either immediately or later is explained by Philp (2003) as being because long recasts are difficult to retain in working memory as they may overload the time limitation of the phonological store. In a stimulate recall session in Egi (2007), which revealed that long recasts were less conducive, it was found that learners failed to perceive long recasts as corrective, but this was not the case with shorter recasts. We can assume that in the current study students also failed to repair, and could only acknowledge, due to the overloaded ambiguous nature of long recasts.
4.1.5 Conclusion

The study, which examined the effectiveness of recasts for Japanese high school learners, implied that facilitating optimal effects of recasts for learning, showed a high success rate computed by the criteria which considered acknowledgement, later incorporation, no opportunity, and preferred recasts.

Analyses of the study offer some pedagogical implications. When recasts are given, they should be short with only a single change and should have 5 morphemes or less so that learners can notice them easily and use them to reformulate their original erroneous utterances. No opportunity and preferred recasts were found to reduce the optimal effects of recasts, indicating that only when learners had made errors should corrective recasts be given, followed by an opportunity for learners to reformulate. Recasts to students’ L1 use are most effective, followed by lexical, phonological, and grammatical recasts. In deciding whether or not to give recasts and when choosing the types of feedback, it can be beneficial to keep this order in mind. Doughty (2001) has mentioned that while explicit correction is intrusive, breaking into learners’ utterances, implicit correction such as recasts enables learners to integrate forms as the learner continues to speak. For learners who often have difficulty continuing communication in English, such as the Japanese high school students in the study, the unobtrusive quality of recasts is helpful even at the expense of other disadvantages. It was recorded that two students, who were not necessarily the most proficient in English, produced repair more than twice after corrective recasts. This implies that if students know the corrective purpose of recasts and are given the opportunity to respond, they are more likely to do so. It is crucial for teachers to provide recasts at the right time in the correct manner so that students can notice recasts and thus reformulate their errors.

There are some limitations that need to be recognized. In this study, observable overt acknowledgement was coded as a successful move, which may raise some questions. We
believe that acknowledgement, in general, is a learner’s successful cognitive reaction to recasts, but there is the possibility that students misinterpreted corrective recasts as acceptance, response to contents, or confirmation. Acknowledgement implies that students have paid attention to recasts but they may not have noticed the negative evidence of recasts. In this study it was impossible to measure correctly the degree of learner noticing or the existence of correct interpretation of recasts through acknowledgement since it is not as well evidenced as repair or later incorporation. We have to admit that in some cases acknowledgement may not involve learning–relevant cognitive process. Related to this issue, students’ erroneous responses to corrective recasts were coded as failed in this study. We could assume that the students may have noticed that their original utterances were incorrect and tried to produce more target like ones. It is necessary to explore the validity of the measurement employed in the study. We interpreted that students had to use existing explicit knowledge to respond successfully to grammatical recasts. However, as recasts can function as positive evidence as well as negative feedback, recasts may have the potential of being beneficial in the development of new language. We assume this can be the case when recasts intensively target some specific structure. Further study is needed to examine this. Another limitation of the study is its sample size. Ideally we should have had more students to be interviewed, and more interviewers to provide them with recasts. The results of the study, with only 32 students and one interlocutor engaged in the interview activity, may not be generalizable.

This small-scale study, as the first study to attempt to analyze the effectiveness of recasts with a measurement after scrupulous analysis of recasts and students’ responses, should be seen as preliminary. To confirm the findings of the study, further research on learners’ cognitive reaction to recasts, with more samples, is needed.
4.2 Study 3: Measuring Effectiveness of Recasts Determined by Grammatical Difficulty

4.2.1 Purpose of the Study

Previous research has shown the potential advantages of the recast, although some problems have also been suggested. Previous studies reported that recasts to learners’ grammatical errors were more frequently provided than to any other error types, but that the success rate in grammatical recasts was the lowest. After categorizing grammatical structures as either early developmental (easy) or late developmental (difficult), this study (Sato, 2010a) attempts to examine the effects of recasts according to grammatical difficulty by using an established measurement based on careful analysis of recasts and students’ responses.

4.2.2 Method

4.2.2.1 Participants and Procedure

Participants and procedures are the same as ones in Study 2: Data obtained in Study 2 were used for the purposes of this study.

4.2.2.2 Data Analysis

Varnosfadrani and Basturkmen (2009) coded structures as either early developmental or later developmental, regarding the former as easy, and the latter as difficult. Their categorization (p. 5), based on previous empirical studies, is as follows.

Early developmental (easy):

1. Definite article (the)  
2. Irregular past tense  
3. Plural S

Late developmental (difficult):

1. Indefinite article (a, an)  
2. Regular past tense  
3. Relative clauses
4. Active & passive voice  
5. Third person singular S
We decided to use this categorization, and termed it as “Categorization A”.

Krashen (1982) proposed ranks for structures from early-mastery to later mastery: Progressive (-ing), Plural S, B copula → Be auxiliary, Articles (a/the) → Irregular past tense → Regular past tense, Third person singular S, Possessive–s. However, as it is generally observed that Japanese learners acquire possessive–s earlier than articles (e.g., Shirahata, 1988), we decided to change the positions of the two structures: Progressive (-ing), Plural S, B copula → Be auxiliary, Possessive–s → Irregular past tense → Regular past tense, Third person singular S, Articles (a/the). We divided the structures into two groups as either early developmental (easy) or late developmental (difficult) and termed it “Categorization B”:

Early developmental (easy):
- Progressive (-ing), Plural S, B copula, Be auxiliary, Possessive–s

Late developmental (difficult):
- Irregular past tense, Regular past tense, Third person singular S, Articles (a/the)

Categorizations A and B were used for the analysis. The following are examples of grammatical recasts according to early (easy) or late (difficult) development.

Example 1 Irregular past tense (early in A, late in B)
Student 1: I go to Okinawa two years ago.
David: Oh, you went to Okinawa before. ←recast
Student 1: I was very happy. (Failed)
Example 2 Third person singular S (late in A and B)

Student 2: My sister like English very much.

David: Oh, she likes English. ←recast

Student 2: Yes. She … she … likes English. (Successful)

Although a recast was provided to student 1, she did not repair her original utterance and continued talking. She did not have the opportunity to use “went” later, and was coded as failed. On the other hand, student 2 noticed her mistake and repaired it after the recast, which was coded as successful.

4.2.3 Results

In total, 59 recasts were recorded with 29 of those recasts provided to grammatical errors: The number of recasts to lexical errors was 13; Phonological errors, 10; L1 use, 7. For the present study, we focused only on the data on grammatical recasts. We recorded 5 repairs, 9 times of “acknowledgement”, and 4 times of “later incorporation” after grammatical recasts. We regarded “acknowledgement” and “later incorporation as favorable moves as it was done in Study 2, and calculated the effectiveness of the grammatical recasts as \( \frac{5 + 9 + 4}{29} = 62\% \). The term “success rate” may not be the best one to use here, as acknowledgement may not always show the effectiveness of recasts, and the degree to which recasts have enhanced learning can differ by the three moves (i.e., repair, later incorporation, acknowledgement). However, success rate is meaningful enough to distinguish the three moves from failures (i.e., recasts ignored or unnoticed), so we felt it was an appropriate term to use for the study.

Among 29 grammatical errors, 22 were in Categorization A. Table 4.4 shows the number of recasts, successful moves and success rates for early developmental or easy structures, Table 4.5 shows the same for late development or difficult structures. Among 29 grammatical
errors, 23 were in Categorization B. Table 4.6 shows the number of recasts, successful moves and success rates for early development or easy structures, Table 4.7, for late or difficult structures.

Table 4.4: Categorization A (early development or easy structures)

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Acknowledgement</th>
<th>Later incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite article (the)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Irregular past tense</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Plural S</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

*Success rate=64%*
Table 4.5: Categorization A (late development or difficult structures)

The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Acknowledgement</th>
<th>Later incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>article(a,an)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>past tense</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Reflective clauses</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Active &amp; passive voice</td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Third person singular S</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Success rate = 64%

Table 4.6: Categorization B (early development or easy structures)

The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Acknowledgement</th>
<th>Later incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive(-ing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-ing)</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Plural S</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>B copula</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B auxiliary</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Possessive -s</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Success rate = 60%
Table 4.7: Categorization B (late development or difficult structures)

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Acknowledgement</th>
<th>Later incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irregular past tense</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Third person singular S</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Article (a, the)</td>
<td>3</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

*Success rate = 69%*

4.2.4 Discussion and Conclusion

In measuring the effects of recasts, two measurements were used for the study (categorizations A, B). In Categorization A, success rates of recasts to easy structures and more difficult ones were the same (64%). In Categorization B, which has taken some account of Japanese learners’ developmental progression, success rate was higher in more difficult structures (69%) than in easy ones (60%). Among the three successful moves, namely, repair, later incorporation, and acknowledgement, the degree to which recasts have enhanced learning can be different. In addition, as the sample size is very small, “success” is still a matter of speculation so far. However, recasts can be effective for Japanese high school students’ learning, irrespective of the degree of difficulty of grammatical features. To respond successfully to grammatical recasts, students use existing explicit knowledge, as is the case with elicitation—feedback that does not provide a learner with correct form but instead elicits a correction from a learner. However, as recasts can function as positive evidence as well as negative feedback, by showing a model of what is grammatical and acceptable, recasts may have been beneficial in the development of new language. That is to say, even when students
did not have explicit knowledge on some structures they may have responded successfully after being provided with a model. As a pedagogical implication it can be argued that teachers can provide recasts irrespective of the degree of difficulty of the grammatical structures. If students already have explicit knowledge on the structures, they would notice their ungrammatical utterances immediately after the recasts and repair them. If not, they may learn the correct form of the original utterance, and repair it.

A 62% success rate may not be high enough to be convincing as to the positive effects of recasts for Japanese high school learners, but even among failed moves we could observe the optimal effect of recasts. The following is an example of an erroneous reformulation.

Example

Student 3: I didn’t know what did she like.
David : Oh, you didn’t know what she liked.
Student 3: Yes. I didn’t know what … um

Muzukasii ("difficult" in Japanese).
David: OK. So your mother liked…

The student tried to produce well-formed output, but finally gave up. However, she seems to have noticed that her original utterance was incorrect and tried to produce a correct one. In this situation, even though the student did not successfully produce well-formed output, presumably because of grammatical difficulty, she was in the process of acquisition. As Mackey (2007) argues, recasts might “sensitize” (p.22) learners to produce well-formed output in future output. These erroneous reproductions after recasts occurred 6 times in the study. This small scale study implied the effectiveness of recasts on learning grammar.
4.3 Study 4: Effects of Recasts in a Japanese High School Classroom

4.3.1 Purpose of the Study

Some previous studies showed that recasts were less effective than other types of feedback, such as explicit corrective feedback (e.g., Carroll & Swain, 1993; Ellis et al., 2006; Lyster, 2004; Varnosfadrani & Basturkmen, 2009.) However, it should be noted that explicit corrective feedback can be obstructive. For example, Doughty (2001) claimed that explicit corrective feedback would break the flow of the conversation, and Long (2007) pointed out that overt error correction can be disruptive causing “unpleasant side effects” (p. 77). It is worthwhile to examine, with Japanese high school learners, whether explicit corrective feedback, such as explicit correction, elicitation, metalinguistic feedback, is more obstructive than recasts are by causing communication breakdowns.

The present study (Sato, 2011a) examines the effects of recasts on Japanese high school learners, most of whom are college bound, and this time, recasts are provided by a native speaker of English. The research questions of the study are as follows:

RQ1. To what extent do students repair their errors after a recast?
RQ2. What type of recasts, which potentially hinder the optimal effect of recasts, does the native speaker provide?
RQ3. Is explicit corrective feedback more obstructive than recasts are by causing communication breakdowns?

4.3.2 Method

4.3.2.1 Participants and Procedure

Participants and procedures are the same as ones in Study 2: Data obtained in Studies 2 and 3 were used for the purposes of this study.
4.3.2.2 Data Collection and Analysis

In interactions between David and the students, 142 recasts were recorded, among which 43 (30%) did not provide students with uptake opportunities. In these instances David continued to speak after providing recasts, leaving no opportunity for students to show repair. It has been reported that teachers tend to use repetitions in teacher-student interaction (e.g., Lyster, 1998a; Sato, 2006) to show, for example, acceptance, approval or confirmation (Lyster, 1998a). These non-corrective repetitions were not counted as recasts in this study since they did not include rephrasing or changing of students’ utterances. However, a very similar phenomenon which could reduce the salience of “real corrective recasts” was reported in the present study. On many occasions (40 instances were reported), David responded to students’ correct forms by providing recasts to show his preferences or to “edit discourse” (Mohan and Beckett, 2001, p.138 [as cited by Long, 2007]). Tentatively in the study, I decided to use the term “preferred recast” which showed David’s preference or inclination. When students are not given the opportunity to respond to recasts they consequently cannot do so. When they are given recasts to their correct utterances students do not have to reformulate their original utterances, as we consider recasts to be given to let learners notice their errors in order to correct them. The measurement to examine the effectiveness of recasts taken was: “no opportunity” and “preferred recast” were not included in the denominator. Confirmation checks with reformulations of erroneous utterances that maintain the central meaning intended by the student were coded as recasts in the present study. Simple repetitions without reformulations were not coded as recasts. The following is an excerpt of a confirmation check coded as a recast.²

² All names are pseudonymous
Excerpt 1

Kosuke: I don’t take care of my little sister last year.

David: Oh, you didn’t take care of your sister then. (recast)

Kosuke: Ah, I didn’t take care of her. (Successful)

To examine whether explicit corrective feedback is more obstructive than recasts are, explicit correction, elicitation, and metalinguistic feedback were analyzed. Table 4.8 illustrates the definitions with examples of explicit corrective feedback.

Table 4.8: Definitions and examples of corrective feedback

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit correction</td>
<td>Explicit provision of the correct form</td>
<td>“You should say just discuss.” Not discussed about.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Discussed your future.”</td>
</tr>
<tr>
<td></td>
<td>(Lyster &amp; Lanta, 1997)</td>
<td></td>
</tr>
<tr>
<td>Elicitation</td>
<td>Techniques the teachers use to elicit the correct form from learners</td>
<td>“Try that again.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“What did you say?”</td>
</tr>
<tr>
<td></td>
<td>(Lyster &amp; Ranta, 1997)</td>
<td>“Last night you …”</td>
</tr>
<tr>
<td>Metalinguistic</td>
<td>Provision of comments, information, or questions related to learners’ metalinguistic knowledge</td>
<td>“It’s plural.”</td>
</tr>
<tr>
<td>feedback</td>
<td></td>
<td>“Did you use the past tense?”</td>
</tr>
<tr>
<td></td>
<td>(Lyster, 2004)</td>
<td></td>
</tr>
</tbody>
</table>
The interviews as stimulated recall measurements were conducted only when it was needed to confirm interpretations of some phenomena with 12 students. That is to say, how students felt when: an opportunity to respond was not given; a preferred recast was given; explicit corrective feedback was given. Interviews with students were conducted in Japanese two weeks after the study. After listening to tape-recorded segments containing the phenomena (no opportunity, or preferred recast, or explicit corrective feedback) students were asked how they felt then.

### 4.3.3 Results and Discussion

#### 4.3.3.1 To What Extent do Students Repair Their Errors After Recasts? (RQ1)

The analysis yielded a total of 142 recasts to the students’ utterances. Students successfully responded immediately after them 20 times in the form of repair. As “no opportunity” and “preferred recast” were not included in the denominator, the calculation conducted was: \( \frac{20}{142 - 43 - 40} = 34\% \). 20 is the total number of repair; 142, the total number of recasts; 43, no opportunity; and 40 is the number of preferred recasts. As table 4.9 shows, 34% of recasts were successfully followed by repair.

<table>
<thead>
<tr>
<th>Recast</th>
<th>Repair</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>20</td>
<td>34%</td>
</tr>
</tbody>
</table>

#### 4.3.3.2 What Type of Recasts, Which Potentially Hinder the Optimal Effect of Recasts, Does the Native Speaker Provide? (RQ2)

As is mentioned earlier, with qualitative data collection, two distinctive phenomena in
providing recasts, which potentially hindered learners’ repair, emerged.

4.3.3.2.1 No Opportunity

In 43 instances David continued to speak after providing recasts, leaving no opportunity for students to show repair. The following is an example.

Excerpt 2

Yuki: I play violin in junior high school.

David: You played the violin. OK. Was it difficult?

↑(No opportunity)

Excerpt 3

Yosuke: My mother like it very much.

David: Oh, she likes it. How about you?

↑(No opportunity)

This phenomena has been reported previously, both in laboratory settings and classroom settings (e.g., Oliver, 1995; Sato, 2006; Zhao and Bitchener, 2007), and was coded as “no repair” (e.g., Lyster and Ranta, 1997; Lyster, 1998b). However, this “no repair” does not mean that students did not really understand the feedback provided as recasts (Zhao and Bitchener, 2007). Oliver (1995) has argued, if students had been given the opportunity to respond they could have done so successfully. In the stimulated recall interview it was confirmed that Yuki and Yosuke noticed their errors when the recasts were provided. It is assumed that the exclusion of recasts which did not provide the opportunity for response for analysis, as is
done in McDonough (2007), is theoretically and methodologically sound.

4.3.3.2 Preferred Recasts

Preferred recasts were examined and analyzed qualitatively, and they were classified into four groups according to their functions: formalizing, simplifying, elaborating, and changing a word(s) or a grammatical structure(s). This grouping was conducted by two raters. When they had disagreements, they had discussions to arrive at a final decision, but three cases for which agreements were not obtained were excluded from the analysis. However, we have to admit that setting the exact boundary between the four categories was a difficult task. The decisions were made interpretatively; some cases could overlap.

The following are examples of each type of non-corrective recast and the numbers in parentheses are the frequency of the phenomenon. In these examples, the students’ utterances were grammatical or natural in the discourse, and David provided recasts to make them more favorable to him.

Excerpt 4 Formalizing (19)
David: What junior high school did you go to?
Maruko: Osatsube.
David: Oh, you went to Osatsube junior high (preferred recast)

Excerpt 5 Formalizing (19)
David: What kind of books have you been reading lately?
Naoto: Japanese history.
David: Oh, you have been reading Japanese history. (preferred recast)
Excerpt 6 Simplifying (8)

David: Tell me about your brother.

Mika: My brother teaches English.

David: Teacher. (preferred recast)

Excerpt 7 Simplifying (8)

Reiko: I didn’t study hard when I was very tired.

David: You weren’t a hard worker. (preferred recast)

Reiko: Yes. Yes.

Excerpt 8 Elaborating (7)

David: How can you help people?

Kazuo: I want to be a lawyer.

David: Oh, you want to be a lawyer who can work to help others.

(preferred recast)

Excerpt 9 Elaborating (7)

David: How do you reduce your stress? What do you do when you are under stress?

Rie: … stress? Oh, I do… yoga…

David: You practice yoga to get rid of your stress. (preferred recast)

Excerpt 10 Changing a word(s) or a grammatical structure(s) (6)

Yukie: I like singing.

David: Oh, you like to sing. (preferred recast)
Excerpt 11 Changing a word(s) or a grammatical structure(s) (6)

Akiyoshi: My glass, glasses broken when I was playing basketball.
David: Your glasses got broken while you were playing basketball.

(preferred recast)

Ellis and Barkhuizen (2005) used the term “possible-but-not-preferred” (p.59) for this type of learners’ utterance. Whether or not correct “possible-but-not-preferred” utterances, such as “My hobby is sleeping” (recorded in the present study), can totally hinges on the interlocutor’s preference. A similar phenomenon is reported in Mohan and Beckett (2001) in which a teacher consistently provided recasts not to correct errors but to show models of more academically appropriate language. In Yoshida (2010), which examined Japanese language teachers’ and learners’ perceptions of corrective feedback, a teacher gave a feedback to a learner’s correct sentence with the intention to suggest a more appropriate form. However, in the stimulated recall interview, the learner mentioned that she thought the teacher corrected her sentence and she could not understand what the teacher was saying. In the present study, students did not show well-formed output after preferred recasts. They only acknowledged the recast 13 times by saying “yes” or nodding; did not notice or ignored the recasts 8 times. In four cases students responded by ill-formed output, as Excerpts 12 and 13 show.

Excerpt 12 Ill-formed output after preferred recast

Katsuhisa: I want to learn knowledge about history.

David: You want to be knowledgeable about history. (preferred recast)

Katsuhisa: … No, no. I’m not.

David: OK, so…
Excerpt 13 Ill-formed output after preferred recast

Akiko: My mother always scolds me.

David: Oh, you are often scolded by your mother. (preferred recast)

Akiko: No. My mother don’t…

David: OK, so…

In both of the examples, the students could not understand David's preferred recasts and became confused. In a stimulated recall interview, Katsuhisa (in excerpt 12) mentioned:

As I couldn’t understand what he said, I was confused. I just guessed that he asked me if I was very good at the subject. So I said, “no”.

(Katsuhisa, interview)

Akiko (in excerpt 13) also confessed:

David spoke very fast, so I couldn’t understand what he said. I thought he might have asked if my mother had done something bad to me. Maybe I felt pressured to say something and I said something. (Akiko, interview)

In the rest of the cases of preferred recasts, opportunities to respond were not given.

4.3.3.3 Is Explicit Corrective Feedback More Obstructive Than Recasts are by Causing Communication Breakdowns? (RQ3)

---

3 Student’s quotations are written with a deliberate effort to retain the conversational features of the original Japanese (translated by the researcher).
In this study, as explicit feedback, explicit correction, elicitation, and metalinguistic feedback were analyzed. The following are episodes extracted from the present study.

Excerpt 14
Kahoko: We discussed about our future.
David: Not discussed about. Discussed your future. (explicit correction)
Kahoko: Ah, discussed. About iranai (is not needed in Japanese)… discuss, discuss (said to herself) … (silence)…
David: OK. What will you do tomorrow?

Excerpt 15
Takeshi: When I was a child, I always play soccer.
David: When you were a child, you always….what did you say? (elicitation)
Takeshi: … (silence)… Ah, played, played. I played soccer.
David: OK. Good. …

Excerpt 16
Sonoko: Yesterday I buy… bought three book.
David: Plural, Fukusu-desu. (That must be plural, in Japanese). (metalinguistic feedback)
David: Of, course. You should be careful.
David: OK… What junior high school did you go to?
In Excerpt 14, after the break of the flow, David had to change the topic. In Excerpt 15, David explicitly elicited a reformulation from the student by pausing and asking a question. When David tried to elicit the correct form, the student’s attention as well as David’s shifted from the meaning to the form. After David’s compliment (“OK. Good.”), there was a silence and David changed the topic. In the stimulated recall interview, Takeshi (in Excerpt 15) mentioned:

I had prepared a soccer story for the test. I practiced and memorized a lot of words, expressions and sentences. I really wanted to tell how much I had enjoyed playing soccer when I was a child. But after David pointed out my grammar error, I don’t know why but I did not feel like talking about the story for some reason. (Takeshi, interview)

Kahoko (in Excerpt 14) mentioned:

I wanted to enjoy talking with David because I like English. But he didn’t seem to be enjoying it as he was checking my errors and teaching the correct forms. I felt a little bit demotivated. (Kahoko, interview)

In Excerpt 16, after metalinguistic feedback followed by Sonoko’s repair the topic changed. Sonoko had thought she would explain about the books she bought:

I was thinking how I would explain about the three books I had bought. I thought I would be able to do it well. But the topic was changed. I felt disappointed. It was impossible for me to ask him to go back the previous topic. (Sonoko, interview)
In total, 16 explicit corrective feedback were reported, followed by 8 (50%) communication breakdowns, which means a long silence (more than three seconds) followed by a sudden topic change. Table 4.10 summarizes this.

Table 4.10: Number of explicit feedback and communication breakdowns

<table>
<thead>
<tr>
<th></th>
<th>the number of times</th>
<th>communication breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit correction</td>
<td>4</td>
<td>2 (50%)</td>
</tr>
<tr>
<td>Elicitation</td>
<td>7</td>
<td>4 (57%)</td>
</tr>
<tr>
<td>Metalinguistic feedback</td>
<td>5</td>
<td>2 (40%)</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>8 (50%)</td>
</tr>
<tr>
<td>Recast</td>
<td>59</td>
<td>4 (7%)</td>
</tr>
</tbody>
</table>

Unlike other types of feedback, recasts are not obstructive in nature, as has been noted in other research as “…their implicit and genuinely unobtrusive qualities will allow teachers and learners to continue their joint focus on meaning…, while still dealing with linguistic problems” (Long, 2006, p. 103). In this study communication breakdowns after real corrective recasts were observed only four times (7%). Doughty (2001) has mentioned that while explicit correction is intrusive, breaking into learners’ utterances, implicit correction enables learners to integrate forms as the learner continues to speak. The findings of the present study were compatible with this argument. Although recasts can sometimes hinder learners from noticing correct forms, recasts are useful in providing correct forms in that they do not disturb the flow of communication without intimidating students by not explicitly pointing out their errors (Yoshida, 2010). For learners who often have difficulty continuing communication in English, such as the Japanese high school students in the study, the unobtrusive quality of recasts is helpful to engage them in more communication.
4.3.4 Conclusion

The results of the study imply that no opportunity and non-corrective preferred recasts would reduce the optimal effects of recasts, indicating that only when learners had made errors should corrective recasts be given, followed by an opportunity for learners to reformulate. Preferred recasts, which were not conspicuous in the study with a Japanese teacher (Sato, 2006), were often provided in this study presumably because the native speaker had a lot of options or a store of English. We could expect that highly proficient Japanese teachers of English would show this phenomenon, too. As preferred recasts are an additional, they should be given mainly to higher level learners. Students’ already correct utterances can be more refined by the recasts. A 34% success rate may not be high enough to be convincing as to the effectiveness of recasts, but their use can still be encouraged, as recasts are not as obstructive as other type of explicit corrective feedback, such as explicit correction, elicitation and metalinguistic feedback.

It should be noted that through the interpretations of recast-related phenomena in the study, we cannot draw robust conclusions. I conducted interviews as stimulated recall measurements only with 12 students. As the stimulated recall is indispensable in considering the effect of feedback, it should have systematically been done with all of the students and the interlocutor. Further, the definition and categorization of preferred recasts can be problematic. If David had the intention of prompting students’ next utterances, some of the preferred recasts introduced in the study can be considered not as recasts but prompts. In further study, a stimulated recall interview with an interlocutor for introspective data is needed to confirm the interpretation. Grouping of preferred recasts was conducted by two raters, but the decision was made rather interpretatively. A specific criterion is definitely needed to define preferred recasts and categorize them. Furthermore, in this study, the data was collected only through the interview tests conducted by one ALT. Further study should be conducted in the different conversational
situations with other native speakers, as well as highly proficient Japanese teachers of English having conversations with students.

Since findings are within the context of the learners and the NS investigated in this study, lacking stimulated recall interviews with all of the participants, conclusions should be taken as tentative. This small scale study has shown some interesting findings that have relevance to the EFL classroom. However, the present study should be considered just as a first step to examining effects of recasts on Japanese high school learners. Further theoretical sampling and more credible analysis are needed.

4.4 Summary of Chapter 4

Studies 2, 3 and 4 confirmed the relative effectiveness of recasts provided to Japanese high school learners with intermediate English proficiency. More specifically, Study 2 revealed that short with only a single change recasts are more likely to be noticed by learners leading them to reformulate their original erroneous utterances, and that despite the fact that grammatical recasts are tended to be provided most frequently they are less likely to be noticed by learners. Study 3 implied that recasts can be effective for Japanese high school students’ learning, irrespective of the degree of difficulty of grammatical features. Finally, Study 4 implied that recasts can be encouraging and motivating for learners as they are not as obstructive as other type of explicit corrective feedback. These finding suggest that recasts can be utilized in Japanese senior high school English class, at least, with intermediate level students.
Chapter 5
Measuring the Effects of Recasts on Noticing Through Stimulated Recall

In a number of previous studies, learners’ repair of their initial errors after recasts has been counted as a reliable measure of L2 learning (e.g., Egi, 2010; Ellis & Sheen, 2006; Loewen, 2005; Lyster, 1998b; Lyster & Ranta, 1997; Sato, 2009a). However, doubts have been cast about regarding learners’ immediate reproduction after recasts as an indication of learning since it might be just a “language-like” behavior (Long, 2007, p. 99), and some other researchers are also cautious about the interpretation of repair because of the possibility that learners can just repeat the recasts in a parrot-like fashion without understanding their corrective intention (e.g., Bao et al., 2011; Egi, 2010; Gass, 2003). It has also been reported previously that learners could not respond to proffered recasts only because interlocutors often did not provide opportunities for learners to repair their utterances (e.g., Loewen & Philp, 2006; Oliver, 1995; Sato, 2009; Zhao & Bitchener, 2007).

Researchers argue that learners have to notice the corrective intention of recasts by attending to the linguistic problems in their initial utterances so that recasts can be effective for learning (e.g., Gass, 1997, Schmidt, 1990). This means that when learners notice the gap between their erroneous utterance and the recast, learning can occur (Schmidt, 1990). Another approach in evaluating the effects of recasts focuses on learners’ cognitive processes when they are provided recasts. Stimulated recall is a retrospective method to elicit the thought processes involved in carrying out an activity (Gass & Mackey, 2000). This method is intended to probe learners’ perception of recasts and the extent to which recasts can engage
learners in a cognitive comparison, or noticing (Ellis, 1994). By using a stimulus, such as an audio or a video recording, learners are asked to report what they were thinking at the time of the activity. This approach of eliciting learners’ commentaries as evidence of noticing in oral interaction has been widely used (e.g., Egi, 2010; Mackey, et al, 2000; Yoshida, 2010).

In this chapter, two studies (Sato, 2013a; 2013b), which examined learners’ noticing through stimulated recall are reported.

5.1 Study 5: Examining Intermediate-level Japanese University Students’ Perceptions of Recasts

5.1.1 Purpose of the Study

Egi (2010) explored into the relationship between uptake and noticing by using the stimulated recall approach. In the laboratory study, twenty-four Japanese as a Foreign Language (JFL) learners were engaged in task-based interactions in which they were provided recasts of their problematic utterances. After that, each of the learners watched a video recording of recast episodes in order to make a comment on them. The analysis of the stimulated recall reports found that learners who perceived that the recasts had corrective intention were more likely to produce uptake after recasts. In addition, it was found to be statistically significant that learners who correctly repaired their initial problematic utterances reported not only noticing the corrective intention of recasts but the gap between their initial production and the model provided in the form of the recasts more than those who did not. Egi cautiously states that uptake, especially repair, can indicate learners’ noticing of recasts, but that even when learners do not notice, they can repair, or, conversely, even when learners notice, they may not be able to repair. This is compatible with Bao, et. al (2011) which summarizes that the rate of noticing is higher when it is measured by stimulated recall than when measured by learner uptake.
Yoshida (2010) investigated perceptions of corrective feedback using audio recordings and stimulated recalls of seven university JFL learners and two university JFL teachers. In the study, it was observed that recasts were more frequently provided than any other types of feedback such as metalinguistic feedback, elicitation, explicit correction and repetition. Learners successfully repaired after 52% of recasts and did not respond to 13% of recasts. Analysis of the stimulated recall interviews found that 25 out of the 48 students, when they repaired after recasts, learners noticed recasts as realizing corrective intention, or found the gap between their initial production and the recast. However, noticing did not always happen when learners acknowledged (10 out of 48 instances) or inquired (5 out of 48 instances) recasts. Yoshida concludes that learners’ response to corrective feedback does not always indicate noticing or understanding of the corrective feedback. Although noticing did not always accompany acknowledgement or inquiry in Yoshida (2010), these two studies indicate that counting learner repair in measuring the effectiveness of recasts may be valid.

As these previous studies (e.g., Egi, 2010; Yoshida, 2010) were conducted with JFL learners, it is necessary to also examine whether Japanese English as a Foreign Language (EFL) learners actually notice recasts when they repair. In addition, it is crucial to examine learners’ noticing when they fail to repair correctly, did respond, or acknowledge recasts, as well as their perceptions of recasts as it would have implication on the measurement of the effectiveness of recasts.

With this background, the following research questions have been formulated for this study:

RQ1. Did noticing occur when learners

1) repaired?

2) repeated the same error or made another error (needs-repair)?
3) failed to respond to the recasts (no uptake)?
4) acknowledged the recasts (acknowledgement)?

RQ2. What are learners’ perceptions of recasts?

The first research question is motivated by the consideration of whether repair can be counted as a valid measurement of recast effectiveness, and whether acknowledgement can be regarded as a favorable response to recasts in that it accompanies noticing. The second research question stems from the desire to find out how learners perceive recasts other than by noticing.

5.1.2 Method
5.1.2.1 Participants

Three university students in the same national university of education in Japan, Kanako, Yuki, and Kouki (all names are pseudonyms) participated in the study. Kanako was a graduate student majoring in music who also held an English teaching license. In the same year, before the study was conducted (September, 2011), she had studied English teaching methodologies in Canada for 6 months. Yuki was a senior majoring in English education who had studied abroad at an American university for 10 months, from September 2010 to July 2011. Kouki, who was majoring in English education, had studied at a South Korean university for 10 months, from September 2010 to July 2011. His decision to study abroad in Korea was motivated by his strong desire to learn a different Asian culture, which he thought would be useful in teaching English at Japanese junior high schools. At that university, he took a lot of English medium classes with other international students, and used both English and Korean in his daily life there.
All participants had already passed the pre-first grade of the STEP Test\(^4\) and were preparing to take the first grade of the STEP Test at the time of the study. As they also had no problem communicating in English, they can be regarded as, at least, intermediate learners of English. The breakdown of the participants in the study is shown in Table 5.1:

<table>
<thead>
<tr>
<th>Name</th>
<th>Major</th>
<th>Age</th>
<th>Gender</th>
<th>English Proficiency</th>
<th>Study Abroad Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanako</td>
<td>Music</td>
<td>23</td>
<td>F</td>
<td>pre-first grade STEP Test</td>
<td>Canada (6 months)</td>
</tr>
<tr>
<td>Yuki</td>
<td>English</td>
<td>22</td>
<td>F</td>
<td>pre-first grade STEP Test</td>
<td>America (10 months)</td>
</tr>
<tr>
<td>Kouki</td>
<td>English</td>
<td>22</td>
<td>M</td>
<td>pre-first grade STEP Test</td>
<td>South Korea (10 months)</td>
</tr>
</tbody>
</table>

The researcher is a male Japanese teacher of English with more than twenty years of professional experience.

**5.1.2.2 Procedure**

The study involved two sessions conducted privately in the researcher’s office. Both sessions were recorded by both a digital video camera and an audio recorder. The first was a one-to-one interaction between the student and the researcher. After L2 small talk aimed at easing tension while creating a comfortable atmosphere, students’ were, at first, engaged in a

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\(^4\) The STEP Test is an English proficiency test conducted by a Japanese non-profit organization, the Society for Testing English Proficiency, Inc. (STEP), and backed by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT). The test consists of listening and writing sections followed by a speaking test, and has been generally regarded as one of the most reliable and valid English proficiency tests in Japan. MEXT requires Japanese teachers of English to possess at least pre-first grade scores on the STEP test.
picture description activity adopted from the pre-first grade of the STEP Test, followed by a free conversation in the form of a semi-structured interview. In the picture description activity, students were given a horizontal sequence of four pictures, and were required to describe the story depicted. As the same four pictures were used for all three students, the expected descriptions were also the same. In the interview, the researcher asked questions about the students’ study abroad experience, and daily life, covering topics such as hobbies, study, family, and future dreams. On the same day, several hours after the first session, stimulated recall interviews were conducted in the same manner, but in Japanese. All recordings were transcribed and re-checked by the author to ensure their accuracy. Additionally, in a limited number of cases where there were unresolved transcription difficulties, individual participants were invited to interpret the results.

Table 5.2 shows the sequence of the procedure.

<table>
<thead>
<tr>
<th>First session</th>
<th>Second session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral tasks (Picture description, Interview)</td>
<td>Stimulated recall</td>
</tr>
<tr>
<td>Kanako</td>
<td>44 minutes long (from 9:30, September, 30, 2011)</td>
</tr>
<tr>
<td>Yuki</td>
<td>36 minutes long (from 10:00, October, 4, 2011)</td>
</tr>
<tr>
<td>Kouki</td>
<td>40 minutes long (from 9:00, October, 26, 2011)</td>
</tr>
</tbody>
</table>

**5.1.2.3 Recasts**

In the majority of the previous studies that examined the effectiveness recasts, recasts were provided intensively for learners’ erroneous productions of pre-selected target forms while ignoring all other types of errors. However, as recasts are “by far the most frequently used feedback across a spectrum of classroom settings” (Lyster, 2007, p. 93), it is clear that
recasts are provided to a wide range of problematic learner utterances in natural classroom settings. It can be argued that pre-selecting target forms for intensive recasts in research settings can be of little significance for practicing teachers seeking implications for actual teaching (Ellis & Sheen, 2006), and focusing on one or a few error categories may lead students to neglect others (Xu, 2009). In the current study, therefore, there was no target focus in providing recasts. They were provided extensively and randomly depending mainly on the researcher’s common sense intuitions and experience as is usually done in EFL classroom settings.

Regarding their characteristics, the recasts provided in the study met all of the following criteria: (a) they were provided immediately after participants’ erroneous productions; (b) they were repetitions of all or part of the participants’ initial utterances, plus reformulations of students’ erroneous productions; (c) and they did not add or change any information from the participants’ initial target-like utterances, except for pronouns. After all of the recasts, the participants were given opportunities to respond. In addition to the recasts, prompts (i.e., clarification requests, repetitions, metalinguistic clues and elicitation) and explicit correction were also given, as is usually done in EFL classroom settings.

5.1.2.4 Stimulated Recall

On the same day after the first session, the stimulated recall interview was conducted as previous studies suggest that learners can recall recent activity more accurately (e.g., Egi, 2008). The stimulated recall was carried out in the students’ L1, Japanese, because the information they were asked to deliver was complex (e.g., Nabei & Swain, 2002). The video recorded interactions between individual participants and the researcher was shown as a visual cue in order to elicit valid data. Before viewing the video, students were given the following recall instruction, which was adapted from previous studies (e.g., Egi, 2004, 2008).
You are going to watch a video tape of the conversation session we had this morning. While the video is playing, I will occasionally pause the tape. When I pause the video, tell me in Japanese what you were thinking during the clip you just saw. I’m interested in what you were thinking about at the time the video was taken. Please try to recall what you were thinking about at the time the video was taken not what you are thinking about now as you watch the video. If you do not remember what you were thinking at the time, you can say “I don’t remember”. (Translated into English by the author)

These instructions were given verbally in Japanese, after which participants received a brief training in stimulated recall using the video of the small talk at the start of the first session. The video was paused after any recasts, other types of feedback, and after some correct utterances randomly selected as distracters (AI-Surmi, 2012; Egi, 2008). The picture used in the picture description activity was also presented to the students to facilitate recall of thoughts (AI-Surmi, 2012; Egi, 2008). The interviewer listened passively to the participants’ recall without being a conversational partner who could ask leading questions (Egi, 2008; Gass & Mackey, 2000).The whole session was audio and video taped, and all recordings were transcribed and re-checked by the author to ensure their accuracy.

5.1.2.5 Data Analyses

5.1.2.5.1 Coding

Learners’ responses after recasts were categorized based on previous studies (e.g., Egi, 2010; Lyster & Ranta, 1997) in Table 5.3.
Table 5.3: Uptake types and definitions

<table>
<thead>
<tr>
<th>Uptake type</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair</td>
<td>The learner successfully corrected the original error after the recast.</td>
</tr>
<tr>
<td>Needs-repair</td>
<td>The learner repeated the same error or made another error after the recast.</td>
</tr>
<tr>
<td>No uptake</td>
<td>The learner did not show any response following the recast</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>The learner simply acknowledged the recast</td>
</tr>
<tr>
<td></td>
<td>(e.g., by saying “yes”, “no”, “I see” or by nodding.)</td>
</tr>
</tbody>
</table>

In Lyster and Ranta (1997) and Egi (2010), acknowledgment was included in the category of needs-repair. In this study, however, acknowledgement was coded as an independent category because, as mentioned earlier, the degree of noticing in acknowledgement can be different from that in repeating the same error or making another error.

Learners’ perception of recasts from the stimulated recall interview data were coded as “noticing” when learners’ comments indicated that they recognized the corrective intention of recasts and attended to the linguistic problems of their initial utterances (Gass, 1997; Schmidt, 1990). This is based on Schmidt’s Noticing Hypothesis (1990, 2001), which suggests that learning occurs when learners notice the gap between what they produced and the recasts received. Following Egi, (2004) and Nabei and Swain (2002), other cases were coded as: 1) attending to meaning; 2) attending to other linguistic aspects; 3) no understanding; 4) no memory; 5) other. In these previous studies, “no understanding” was not identified as a category. However, in the current study students often reported not understanding the aim or intention of recasts, leading to the inclusion of this category. These codes are summarized in Table 5.4:
Table 5.4: Coding of learners’ perceptions and definitions

<table>
<thead>
<tr>
<th>Types of perception</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noticing recasts</td>
<td>Cases where the learners’ comments indicated they had paid attention to the fact that their initial utterances were problematic and found the gap with the recasts (e.g., “The teacher said “the child” and I realized I mistakenly used the plural form”).</td>
</tr>
<tr>
<td>Attending to meaning</td>
<td>Cases where the learners’ comments indicated that they had reflected upon the contents of the discussion (e.g., “I thought the teacher wondered if what I had said was a joke”).</td>
</tr>
<tr>
<td>Attending to other linguistic aspects</td>
<td>Cases where the learners’ comments indicated that they had paid attention to linguistic items other than what the recasts had targeted (e.g., “I thought my word choice was wrong”).</td>
</tr>
<tr>
<td>No understanding</td>
<td>Cases where the learners’ comments indicated that they had not understood what the recasts intended. (e.g., “I could not understand why the teacher said so”).</td>
</tr>
<tr>
<td>No memory</td>
<td>Cases where the learners could not remember their own thoughts at the moment the recasts were given (e.g., “I just cannot remember”).</td>
</tr>
<tr>
<td>Other</td>
<td>Cases where the learners’ comments could not be classified into any of the categories above (e.g., the teacher said “had”, which is what I actually had said, I thought).</td>
</tr>
</tbody>
</table>

The coding was conducted by the researcher using the transcriptions, and redone a week after the first classification. This method of classification follows Alderson, Clapham and Wall (1995), who assert that multiple rating sessions increase the reliability of rating. Where there were four cases of discrepancies between the two ratings, a second rater, a male graduate
student majoring in English education, was invited to rate them. After discussion between the author and the second rater, the disagreement was resolved.

5.1.2.5.2 Statistical Analyses

In addition to reporting the raw frequencies and percentages, univariate and bivariate chi-square statistics were conducted to examine whether there were statistical differences in frequencies. Due to the small sample data, an effect size analysis was employed in order to interpret the data more accurately. Values of effect sizes of “w” (univariate) and “φ” (bivariate) were interpreted as follows: small (0.1 < w, φ < 0.3); medium (0.3 < w, φ < 0.5); large (0.5 < w, φ), following Cohen (1988).

5.1.3 Results and Discussion

5.1.3.1 Did Noticing Occur When Learners 1) Repaired, 2) Repeated the Same Error or Made Another Error, 3) Failed to Respond to the Recasts, 4) Acknowledged the recasts? (RQ1)

The interaction between the researcher and each of the participants in this study lasted 120 minutes in total and resulted in a total of 70 recasts. Thirty four of them (49%) were followed by repair, 9 (13%) resulted in needs-repair, 15 (21%) in no uptake, and 12 (17%) were followed by acknowledgement. Table 5.5 summarizes the raw frequencies of repair, needs-repair, no uptake and acknowledgement by each person:
Table 5.5: Raw frequencies of repair, needs-repair, no uptake and acknowledgement

<table>
<thead>
<tr>
<th></th>
<th>Recast</th>
<th>Repair</th>
<th>Needs-repair</th>
<th>No uptake</th>
<th>Acknowledgement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanako</td>
<td>25</td>
<td>13</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Yuki</td>
<td>15</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Kouki</td>
<td>30</td>
<td>14</td>
<td>3</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>34 (49%)</td>
<td>9 (13%)</td>
<td>15 (21%)</td>
<td>12 (17%)</td>
</tr>
</tbody>
</table>

The first research question asked whether noticing occurred when learners 1) repaired, 2) repeated the same error or made another error (needs-repair), 3) failed to respond to the recasts (no uptake), or 4) acknowledged the recasts (acknowledgement). Table 5.6 shows the raw frequencies of repair, needs-repair, no uptake and acknowledgement with the frequencies of noticing and no noticing:

Table 5.6: Raw frequencies of repair, needs-repair, no uptake and acknowledgement with the frequencies of noticing and no noticing.

<table>
<thead>
<tr>
<th></th>
<th>Recast</th>
<th>Repair</th>
<th>Needs-repair</th>
<th>No uptake</th>
<th>Acknowledgement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noticing</td>
<td>No noticing</td>
<td>Noticing</td>
<td>No noticing</td>
<td>Noticing</td>
</tr>
<tr>
<td>Kanako</td>
<td>25</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Yuki</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Kouki</td>
<td>30</td>
<td>12</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>27</td>
<td>7</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

To calculate the percentage of noticing in cases of repair, needs-repair, no uptake and acknowledgement, each of the frequencies for the three students were combined. This measurement was regarded as valid, as their English learning backgrounds and English
proficiencies were not so different. Table 5.7 summarizes the percentages of noticing of repair, needs-repair, no uptake and acknowledgement:

Table 5.7: Percentages of noticing of repair, no uptake and acknowledgement

<table>
<thead>
<tr>
<th></th>
<th>Repair</th>
<th>Needs-Repair</th>
<th>No Uptake</th>
<th>Acknowledgement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>34</td>
<td>9</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noticing</td>
<td>27</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>79%</td>
<td>0%</td>
<td>20%</td>
<td>8%</td>
</tr>
</tbody>
</table>

The results show that 79% of repairs were accompanied by noticing, and even when there was no uptake, 20% of these cases were noticed by participants. Only one case of acknowledgement (8%) was reported noticed, and there was no noticing in the case of needs-repair.

The first research question was motivated by the desire to establish a valid measurement of the effectiveness of recasts. To examine whether counting repair is a valid measurement of the effectiveness of recasts (e.g., Lyster, 1998b; Lyster & Ranta, 1997), we looked at whether statistically significant noticing happened when participants repaired. Out of 34 cases of repair, noticing happened in 27 cases, and in 7 cases it did not happen. A chi-square analysis found that there was a statistically significant difference between them with a large effect size($\chi^2(1)=11.76 \ p=.00 \ w=.59)$, confirming that learners’ repairs were closely related to noticing. This implies that when learners repair their initial errors after recasts, it is significantly more likely that they noticed the recasts.

In the study, 70 recasts were provided among which 34 of them were repaired and 36 were not repaired. As for noticing, 31 were noticed and 39 were unnoticed. To examine whether the effectiveness of recasts measured by repair and noticing are different, we looked at whether
there was a statistically significant difference in frequencies between repair and noticing (repair, 34/70, noticing, 31/70). Chi-square results show that there was not a statistically significant difference between them with a small effect size ($\chi^2(1)=0.26, p = .74, \phi = .04$), meaning that the frequencies of repair and noticing were not statistically different. The result was compatible with Egi (2010), which showed that when learners successfully repaired their errors after recasts, they were more likely to notice the corrective intention of the recasts, as well as the gap between their initial problematic utterances and the recasts. In her study, 75% of repairs were accompanied by noticing, which occurred in 79% of the repair instances in the current study.

The high noticing rate in repair may be attributed to the fact that students are learning English in an EFL environment in which accuracy is regarded as crucial (e.g., Yoshida, 2002). Such learners are highly motivated to get high scores on written tests, which primarily measure accurate grammatical and lexical knowledge of English rather than communicative language ability (e.g., Yashima, Zenuck-Nishide, & Shimizu, 2004). In a stimulated recall interview, one student clearly mentioned that she felt it important to revise her initial utterance in the correct form if she noticed errors after recasts.

In the case of needs-repair, noticing did not occur even once. This is incompatible with Egi (2010), who mentions that learners’ perceptions were not so different regardless of success or failure in repairing, in reference to Swain’s (2005) assertion that the process of producing output itself facilitates L2 learning. In the current study, however, students may not have benefitted from producing output in needs-repair cases because they did not perceive the recasts at all. It can be argued that they repeated the same errors or made different ones because they did not notice the recasts, which indicates the importance of noticing.

As for the 15 instances of no uptake, noticing occurred three times (20%). The frequencies between noticing (three instances) and no noticing (12 instances) were found via chi-square
analysis to have a statistically significant difference between them with a large effect size ($\chi^2(1) = 5.40, p = .02, w = .60$), which means that when learners did not notice recasts, uptake was less likely to happen. This supports Egi (2010), which reported that learners were significantly less likely to notice recasts in no uptake cases compared to repair cases.

As for the issue of whether acknowledgement can be regarded as a favorable response in the process of learning (Sato, 2009a), out of 12 cases of acknowledgement, noticing occurred only once. Chi-square analysis discerned a statistically significant difference in the frequencies between acknowledgement with noticing and without noticing with a large effect size ($\chi^2(1) = 8.33, p = .00, w = .83$), meaning that when learners acknowledged, it was significantly less likely that they noticed the recasts. As previously commented, it may be more likely that students correct their initial errors if they actually notice recasts. This implies that when learners just acknowledge recasts by saying “yes,” “mm”, or nodding, they do not notice them. This result also implies that in measuring the effectiveness of recasts, acknowledgement should not be counted as a successful move. These results therefore suggest, in answer to the first research question, that counting repair is a valid measurement of the effectiveness of recasts.

5.1.3.2 What are Learners’ Perceptions of Recasts? (RQ2)

5.1.3.2.1 Perception of Recasts

The second research question examined how learners perceive recasts other than by noticing. As Table 8 shows, learners noticed 31 recasts (44%) out of 70 in total. In 21 cases (30%), they attended to meaning. In 12 cases (17%), learners did not understand the recasts, and only once did they attend to other linguistic aspects. In four cases (6%), they could not remember what they thought at the moment when the recasts were given.
Table 5.8: Perception to recasts

<table>
<thead>
<tr>
<th></th>
<th>Kanako</th>
<th>Yuki</th>
<th>Kouki</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noticing recasts</td>
<td>12</td>
<td>5</td>
<td>14</td>
<td>31(44%)</td>
</tr>
<tr>
<td>Attending to meaning</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>21(30%)</td>
</tr>
<tr>
<td>Attending to other linguistic aspects</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1(1.4%)</td>
</tr>
<tr>
<td>No understanding</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>12(17%)</td>
</tr>
<tr>
<td>No memory</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4(6%)</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1(1.4%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>25</td>
<td>15</td>
<td>30</td>
<td>70</td>
</tr>
</tbody>
</table>

Among the 39 no noticing situations, “attending to meaning” stands at 54%, followed by “no understanding” at 31%, “no memory” at 10%, and “attending to other linguistic aspects” and “other” at 2.6% each.

Table 5.9: Perception other than noticing

<table>
<thead>
<tr>
<th></th>
<th>Attending to meaning</th>
<th>Attending to other linguistic aspects</th>
<th>No understanding</th>
<th>No memory</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequencies and percentages</strong></td>
<td>21(54%)</td>
<td>1(2.6%)</td>
<td>12(31%)</td>
<td>4(10%)</td>
<td>1(2.6%)</td>
</tr>
</tbody>
</table>

5.1.3.2.2 Noticing Recasts

The following are examples of noticing recasts and the participants’ recall in the
stimulated recall interview.

Excerpt 1 (Kanako, Sep.30)
Kanako: The children don’t go outside to play with his friends.
Researcher: The child?
Kanako: Yes. The child don’t, doesn’t go outside.

Kanako’s recall:
The teacher said “the child”, and I realized I had mistakenly used the plural form.\(^5\)

Excerpt 2 (Yuki, October, 4)
Y: I think it was really great for me because I changed a little bit and knew a lot of things.
R: Oh, you learned a lot of things.
Y: I learned a lot in America.

Yuki’s recall
When I heard the teacher saying “learned”, I remembered that in expressing movement or action, “learn” is better than “know”.

As the above excerpts show, when students noticed recasts and successfully corrected their problematic initial utterances, in 24 out of 31 cases their comments implied they had used their learned or partially learned explicit knowledge, which is the conscious knowledge about language that learners can potentially verbalize (e.g., Ellis, 2003). Such deduction is valid, if

\(^5\) The original comments in the stimulated recall were all in Japanese.
we refer to, for example, Krashen (1985), who points out that L2 learners can monitor their own production consciously by using their explicit knowledge. In the study, as enough time was given to students to monitor their own utterances and repair, it can be interpreted that they mainly exercised explicit knowledge. This would imply the importance of explicit knowledge in noticing recasts. However, in the rest of the seven cases, the participants might have also used implicit knowledge, which is the intuitive knowledge of language (e.g., Ellis, 2003), in repairing their initial errors after recasts. Further study is thus needed to focus on the roles of different types of knowledge in repairing.

5.1.3.2.3 Attending to Meaning

In the case of no noticing, students attended to meaning most (54%).

Excerpt 3 (Kouki, October, 26)

K: I thought Korea might be a good place to learn many things including English. So I really want to go.
R: You really wanted to go there to learn English, too?
K: Because many classes are conducted in English.

Kouki’s recall
I thought the teacher wanted to confirm that I really wanted to go to Korea to learn English, so I added the reason.

As this excerpt shows, when learners’ erroneous utterances did not cause communication breakdown, they often perceived recasts as confirmation (Lyster, 1998a, 2007), as agreement or disagreement, or as a response (Sato, 2006). As recasts help maintain the flow of
communication, keeping learners’ attention on content (Lyster, 2007), it may not be so easy for learners to attend at the same time to the form of the erroneous utterances to which recasts were provided.

5.1.3.2.4 Attending to Other Linguistic Aspects

In only one case, a student attended to a linguistic aspect to which the recast was not targeted.

Excerpt 4 (Yuki, October, 4)

Y: There was a man who was working the office.
R: Working in the office?
Y: Company, and he could help his father’s job.

Yuki’s recall
I said “office” but thought it might be wrong or unsuitable, so I changed it to “company”.

In the excerpt, Yuki did not notice that a preposition was missing before “the office”, but instead she thought the use of “office” was problematic. It appears that Yuki did not have confidence in the use of “office”, and as the word was included in the recast, this lead her not to add a preposition but to change the word “office” to “company”. This implies that when recasts are provided, learners can attend to grammatical items, words, or expressions which they do not have the confidence to use. However, this type of perception of recasts was recorded only once.
5.1.3.2.5 No Understanding

Among no noticing cases, one-third was no understanding in which students did not understand the aim or intention of recasts.

Excerpt 5 (Kanako, Sep.30)
K: She saw “Computer education for kids.”
R: She read the book.
K: The book for computer education.

Kanoko’s recall:
When the teacher corrected my mistake, I did not realize that I had made a mistake. I felt a little bit strange or unnatural that the teacher said so then. Now I understand that I made a mistake. I should have said “read” instead of “saw”.

Excerpt 6 (Kouki, October, 26)
K: She was just wanted her son to learn how to use the computer.
R: His mother wanted him to learn the computer.
K: Yes. Computer.

Kouki’s recall;
I don’t know why the teacher repeated what I meant. Maybe it was important? I don’t know.

In the 12 instances of no understanding, students directly reported or implied in 10 cases that they did not recognize they had made a mistake or an error at the moment when the recasts were provided. This implies that if students cannot monitor their own production to detect
mistakes or errors, they may not be able to understand the intended purpose of recasts. Or, as in the rest of the cases, they may perceive recasts as comments or reactions as mentioned above.

5.1.3.2.6 No Memory

In four cases, students reported they simply could not remember what they thought or how they felt when the recasts were provided. The stimulated recall interview was conducted on the very same day after the first session was conducted. However, memory decay is still a problem, which is often discussed as a concern with retrospective reports (e.g., Egi, 2004).

5.1.3.2.7 Other

Only one case could not be classified into any of the categories above.

Excerpt 7 (Kouki, October, 26)

K: He has been to Japan many times before we met in Korea.
R: He had been to Japan. He had visited Japan before you met.
K: Many times.

Kouki’s recall;
The teacher used the past perfect tense in order to put emphasis on the use in the context. As I thought then that I had used it correctly, I felt it a little strange. But now I know I made a mistake. I said “has” where I should have said “had”.

From his recall, it would appear that Kouki had just made a mistake without noticing it, and then did not notice the recast. We cannot generalize from only this one case, but still it may
imply that learners sometimes may not notice recasts because they are not consciously aware of having made a mistake or an error.

5.1.3.3 Cases of Repair Without Noticing and No Uptake with Noticing

5.1.3.3.1 Repair Without Noticing

Repair was successfully done seven times, even without noticing reported.

Excerpt 8 (Kanako, Sep.30)

R: Who do you look up to? And why?
K: My piano teacher. Because she… she …, Why? She is of course good at playing music, playing piano.
R: Playing the piano.
K: Playing the piano. She always, she can always plays the piano very well.

Kanako’s recall:
I thought the teacher wanted more explanation about why I respect her.

In this excerpt, Kanako’s attention was on the meaning and did not understand the purpose of the recast. However, she just automatically repeated the recast even though she did not have explicit understanding that “the” was needed before “piano”.

6 Among seven cases of repair without noticing, in five cases, students were attending to meaning. In the next excerpt, Yuki did not understand the recast at all.

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6 Her lack of explicit knowledge that “the” should be put before the instrument was confirmed in the interview. However, this may raise an issue. In Japan, following pedagogical grammar (e.g., Shimozaki et al., 2008), many learners have been often taught that “the” is needed before instruments. In descriptive grammar, however, that may not be the case. In fact, an informant mentioned that “she can play piano” sounds natural. Although beyond the scope of the current study, this can be worth further investigation.
Excerpt 9 (Yuki, October, 4)

Y: The Spanish student was a trouble maker. We every… often, we often fight with her.
R: Oh, you often fought with her.
Y: Yes. Fought with her.

Yuki’s recall; I didn’t know why the teacher said, “You often fought with her.” I don’t know why but I just repeated what the teacher said.

In this except, Yuki just automatically repeated the recast even though she did not know that the past form of “fight” is “fought.” Among seven cases of repair without noticing, in two cases, students did not understand the recast at all. As is shown in these excerpts, there are still repair cases for which learners did not notice the recasts, which is pointed out in the previous studies (e.g., Egi, 2010; Elli, Basturkmen & Loewen, 2001).

5.1.3.3.2 No Uptake With Noticing

In three cases, students noticed the recast but could not show uptake.

Excerpt 10 (Kanako, Sep.30)

K: I think, … I like not sports but… I was in the brass band club. It was not comparable.
S: OK, it was not competitive?
K: Yes. We were like good friends. We had to win the contest.

Kanako’s recall; I wanted to mean “competitive” and noticed my mispronunciation. But I did

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7 This was confirmed in the interview.
not correct it because I still did not know how to pronounce it.

Excerpt 11 (Kouki, October, 26)

K: Actually, in Korea, my major… I was belong to English literature.
R: You belonged to?
K: English literature department?

Kouki’s recall: I found that “I was belong to” was wrong and what the teacher said was right. But I just avoided using it because I was not confident to say it correctly.

Excerpt 12 (Kouki, October, 26)

K: I had a chance to introduce my student about my favorite, favorite book.
R: You had a chance to introduce your favorite book to your student.
K:…. The student liked it.

Kouki’s recall: I clearly understood what the teacher said and I found that my use of “introduce” was wrong. But, I thought I would make a mistake again because the sentence was very long, and tried not to use “introduce” again.

These three excerpts showed that the students were hesitant to correct their initial errors even after they noticed the recasts because of their lack of confidence in or explicit knowledge about the targeted words or expressions. This can imply that recasts sometime may not lead to learners’ uptake or repair even when they are noticed if learners think they cannot successfully utilize the recast suggested.

We found that there were cases of repair without noticing and no uptake with noticing.
However, it does not dismiss the validity of counting repair in measuring the effectiveness of recasts because these frequencies were low, and previous analyses showed the frequencies of repair and noticing were not statistically different.

5.1.4 Conclusion

This study investigated learners’ noticing of recasts to discern a valid measurement of the effectiveness of recasts. The findings of the study provide support for the claim that learner repair is an indicator of noticing, while mere acknowledgement is not.

Three learners’ stimulated recall comments showed how learners perceive recasts other than by noticing, which implies the importance of noticing recasts for learning. Although this maybe speculation, the participants’ comments suggest the importance of explicit knowledge of the items which recasts target so that learners can successfully repair their initial problematic utterances. This may then suggest that it is important for teachers to create a learning environment where Japanese EFL learners can learn explicit knowledge.

5.2 Study 6: Examining the Effects of Recasts Types on Noticing.

5.2.1 Purpose of the Study

Previous studies revealed that the effectiveness of recasts measured by learners’ successful uptake or repair (i.e., learners’ correct reformulation of an error occurring immediately after a recast) can differ by the recast type. It has been reported that learners are less likely to repair after grammatical recasts (i.e., recasts to grammatical errors) than lexical and phonological recasts (e.g., Kim & Han, 2007; Trofimovich, Ammar, & Gatbonton, 2007; Sato, 2009a; Williams, 1999). In chapter 4, Study 2 (Sato, 2009a) compared the effects of recasts types on Japanese EFL learner repair, and I cautiously suggested that learners’ explicit knowledge can be a precondition to respond successfully to recasts directed at grammatical errors, although
stimulated recall data was not obtained for the study. As for the effects of recasts, judging by the difference between learners’ utterances and recasts, Study 2 (Sato, 2009a) also revealed the more conducive effect of single-change recasts compared to multiple-change recasts. From the results of previous studies, it can be concluded that short recasts are more easily noticed by learners than long recasts, leading them to repair previous erroneous utterances (e.g., Egi, 2007; Philp, 2003; Sato, 2009a; Sheen, 2006). Egi (2007) found, through a stimulated recall session, that learners failed to perceive long recasts as corrective but that this was not the case with shorter recasts, thus concluding long recasts were less conducive. Philp (2003) explains that long recasts are difficult to retain in working memory as they may overload the time limitation of the phonological store. It can be summarized that long recasts are less effective due to the overloaded nature.

Previous studies explored the effects of recasts in the following manners: according to recasts-types (e.g., Kim & Han, 2007; Phip, 2003; Trofimovich, Ammar, & Gatbonton, 2007; Sato, 2009a; Williams, 1999); by using stimulated recall interviews (e.g., Egi, 2010; Mackey, et al, 2000; Yoshida, 2010). However, the effects of recasts on Japanese EFL learners’ noticing (e.g., Loewen & Nabei, 2007; Muranoi, 2000; Sato, 2009a) have not fully been investigated by the recast-type with a stimulated recall method. With this background, the following research questions have been formulated for this study:

RQ1. How effective are recasts for high intermediate–level Japanese university students’ noticing according to error types?
RQ2. How effective are recasts for high intermediate–level Japanese university students’ noticing according to the degree of differences?
RQ3. How effective are recasts for high intermediate–level Japanese university students’ noticing according to the length?
This study (Sato, 2013b) was also aimed at analyzing learners’ noticing qualitatively through comments provided in the stimulated interviews.

5.2.2 Method

5.2.2.1 Participants and Procedure

Participants and procedures are the same as ones in Study 5: Data obtained in Study 5 were used to be analyzed for the purposes of this study.

5.2.2.2 Data Analysis

5.2.2.2.1 Error Types

Following Lyster and Ranta (1997), students’ errors to which recasts were given were categorized as grammatical errors, lexical errors, and phonological errors: 1) Grammatical errors are errors in the use or lack of determiners, particles, verb forms, or word order; 2) Lexical errors include inappropriate, imprecise, or inaccurate choices of lexical items; 3) Phonological errors address inappropriate, imprecise, or inaccurate pronunciation. In cases where a student produced an utterance with more than one type of error, it was coded as the error type on which the recast focused.

5.2.2.2.2 Degree of difference

The number of changes was counted and coded to examine the effects of the degree of difference between the learner’s initial utterance and the recast, following Philp (2003). For this study, however, recasts were divided into two categories according to whether the recast had only a single change or more than one change. This decision was made referring to Sato (2006, 2009a), which revealed that recasts with more than one change were less likely to be
noticed by the learners. Conversion of the subject was not counted as a change and inversion counted as one change.

5.2.2.2.3 Lengths

Based on previous studies (e.g., Philp, 2003, Sato, 2009a), recasts were also classified as long or short according to the number of morphemes, and recasts with more than five morphemes were coded as long.

5.2.2.3 Noticing

“Noticing” was coded when learners’ comments obtained through the recall indicated that they had recognized the corrective intention of recasts and attended to the linguistic problems of their initial utterances (e.g. “The teacher said “the child” and I realized I mistakenly used the plural form”) (Gass, 1997; Schmidt, 1990). This is based on Schmidt’s Noticing Hypothesis (1990, 2001), which suggests that learning occurs when learners notice the gap between what they produced and the recasts received.

The researcher conducted the coding using the transcriptions, and did it again a week after the first classification, following Alderson, Clapham, and Wall (1995), who assert that multiple rating sessions increase reliability. Where there were four cases of discrepancies between the two ratings, a second rater, a graduate student majoring in English Education, checked them. After discussion between the author and the second rater, the disagreements were resolved.

5.2.2.4 Statistical analyses

In addition to reporting the raw frequencies and percentages, univariate and bivariate chi-square statistics were conducted to examine whether there were statistical differences in
frequencies. Due to the small sample data, an effect size analysis was employed in order to interpret the data more accurately. Values of effect sizes of “w” (univariate) and “φ” (bivariate) were interpreted as follows: small (0.1 < w, φ < 0.3); medium (0.3 < w, φ < 0.5); large (0.5 < w, φ), following Cohen (1988).

5.2.3 Results and Discussion

5.2.3.1 How Effective Are Recasts for High Intermediate–level Japanese University Students’ Noticing According to Error Types? (RQ1)

The first research question asked about learners’ noticing according to error types. The interaction between the researcher and each of the participants in this study lasted 120 minutes in total and resulted in a total of 70 recasts. To calculate the percentage of noticing, each of the frequencies for the three students was combined. As their English learning backgrounds and English proficiencies were not so different, this measurement was regarded as valid in this study. Table 5.10 summarizes the frequencies and the percentages of noticing according to error types:

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Noticing</th>
<th>No noticing</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar</td>
<td>53</td>
<td>18</td>
<td>35</td>
<td>34%</td>
</tr>
<tr>
<td>Lexical</td>
<td>15</td>
<td>11</td>
<td>4</td>
<td>73%</td>
</tr>
<tr>
<td>Phonological</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>31</td>
<td>39</td>
<td>44%</td>
</tr>
</tbody>
</table>

Grammatical recasts were provided most, followed by lexical, with only two phonological
recasts. The rate of noticing was the highest with phonological recasts (100%) as both of these were noticed. The facilitative effects of phonological recasts can be explained by their salience and unequivocalness (Lyster, 1998b).

Excerpt 1 (Kouki, October, 26)

Kouki: I will “launch” (pronounced as lunch) my business.
Researcher: Pardon?
Kouki: “Launch” (repeated the same mispronunciation) my business.
Researcher: You want to “launch” your own business. ←recast
Kouki: Yes. I want to “launch, launch” (pronounced correctly) my business.

Kouki’s recall
When I heard the teacher pronouncing “launch”, I remembered the correct pronunciation of the word.

In this excerpt, as Kouki had explicit knowledge of the meaning of “launch” and partially acquired knowledge of the pronunciation, it was not difficult for him to notice and correct his mistake. In another example, Kanako noticed the recast but could not repair her pronunciation.

Excerpt 2 (Kanako, Sep.30)

Researcher: Do you think that competitive sports build characters in children?
Kanako: … I was in the brass band club, but it was not “competitive” (sounded like comparative)
Researcher: OK, it was not competitive? ←recast
Kanako: Yes. We were like good friends. We had to win the contest.

Kanako’s recall:
I wanted to mean “competitive” and noticed my mispronunciation. But I did not correct it because I still did not know how to pronounce it.

These two excerpts may imply that the noticing of phonological recasts may not be difficult, though repair appears to require that learners at least possess partially acquired explicit knowledge of the pronunciation. Although beyond the scope of the current investigation, further study is needed to explore the roles of explicit pronunciation knowledge in noticing and its relation to repair.

Lexical recasts comprised 73% of the noticing recorded, and grammatical, 34%. Chi-square analysis discerned a statistically significant difference in noticing between grammatical and lexical recasts with a medium effect size ($\chi^2 (1) = 7.41, p = .02, \phi = .33$). These results were compatible with previous studies that showed lower effectiveness of grammatical recasts compared to lexical and phonological recasts as measured by learners’ successful uptake or repair (e.g., Kim & Han, 2007; Mackey, Gass, & McDonough, 2000; Trofimovich, Ammar, & Gatbonton, 2007; Lyster, 1998b; Sato, 2009a; Williams, 1999).

The students were high intermediate learners who had already passed the pre-first grade of the STEP Test, and therefore could be assumed to possess a lot of explicit knowledge of English grammar. In a previous study, Sato (2009a) speculated that explicit knowledge can lead to the noticing of grammatical recasts. This is supported by Saito and Lyster (2012), who argue that learners with ‘good grammatical knowledge’ (p.604) can monitor their utterances. However, in the current study, only 18 out of 54 grammatical recasts were noticed.
Excerpt 3 (Yuki, October, 4)

Kouki: The student lived in the same dorm and she is seventeen.

Researcher: She was seventeen? ←recast

Kouki: Yes. Younger.

Yuki’s recall

I thought the teacher just wanted to confirm that the student was so young. I did not notice my mistake about tense.

Excerpt 4 (Kanako, Sep, 30)

Kanako: If I were the teacher, I don’t … I don’t scold the child.

Researcher: You would not scold. ←recast

Kouki: Yes. If I were her.

Kanako’s recall

As I knew the rule, I used the subjunctive past, but I didn’t notice that I had made a mistake then.

Both recalls imply that learners are likely to perceive grammatical recasts as comments on content or as confirmation checks because of their unsalient and equivocal nature. Grammatical errors can less seriously interfere with understanding than lexical and pronunciation errors (Mackey et al, 2000), and in the current study, I, as a researcher, did not experience interference of understanding caused by these grammatical errors. This must have
made these grammatical recasts unsalient and equivocal. It also can be assumed that it is unlikely that learners monitor their utterances in order to correct grammatical errors to which recasts are given.

5.2.3.2 How Effective Are Recasts for High Intermediate–level Japanese University Students’ Noticing According to the Degree of Differences? (RQ2)

The second research question examined whether there was a difference in learners’ noticing according to the degree of difference between learners’ erroneous utterances and the recasts (i.e., one change vs. more than one change). Recasts with one change were provided 49 times, among which 23 recasts were noticed, and recasts with more than two changes were given 21 times, with 8 such recasts noticed.

Table 5.11: Number of Recasts, Noticing, No noticing, and Success Rate measured by noticing (number of changes)

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Noticing</th>
<th>No noticing</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>One change</td>
<td>49</td>
<td>23</td>
<td>26</td>
<td>47%</td>
</tr>
<tr>
<td>More than one</td>
<td>21</td>
<td>8</td>
<td>13</td>
<td>38%</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>31</td>
<td>39</td>
<td>44%</td>
</tr>
</tbody>
</table>

Although one change recasts were noticed more than multiple change recasts, chi-square analysis revealed there was not a statistically significant difference with a small effect size ($\chi^2(1)=0.47$, $p = .67$, $\phi = .08$). The result can be interpreted as incompatible both with observational and introspective research which showed that recasts with fewer changes are more likely to be noticed (e.g., Egi, 2007; Kim & Han, 2007; Philp, 2003; Sato, 2006, 2009a;
5.2.3.3 How Effective are Recasts for High Intermediate–level Japanese University Students’ Noticing According to the Length? (RQ3)

As for the examination into the effect of length on noticing (RQ3), short recasts (with less than six morphemes) were provided 48 times, among which 23 recasts were noticed, and long recasts (with more than five morphemes) were given 22 times, with 8 such recasts noticed.

Table 5.12: Number of Recasts, Noticing, No noticing, and Success Rate measured by noticing (length)

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Noticing</th>
<th>No noticing</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short</td>
<td>48</td>
<td>23</td>
<td>25</td>
<td>48%</td>
</tr>
<tr>
<td>Long</td>
<td>22</td>
<td>8</td>
<td>14</td>
<td>36%</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>31</td>
<td>39</td>
<td>44%</td>
</tr>
</tbody>
</table>

Although short recasts were provided more than long recasts, with a higher success rate, chi-square analysis revealed that there was not a statistically significant difference in noticing between short recasts and long ones with a small effect size ($\chi^2(1) =0.30, p =.77, \phi= .07$). This result is not compatible with previous research which showed that, regardless of the noticing measure, shorter recasts are more noticeable (e.g., Egi, 2007; Lyster, 1998a; Philp, 2003; Sato, 2009; Sheen, 2006). The following shows noticing of a long, multiple-change recast.

Excerpt 4 (Kanako, Sep.30)

Kanako: We… our eyes should not watch the Internet over one hour. It damaged.

Researcher: You think our eyes can be hurt. ←recast

Kanako: Yes. Eyes can be easily hurt by watching it.
Kanako’s recall:
When my teacher said, “can be hurt”, I realized that I should have used the passive voice and that the subject should be “eyes”.

Her comment implies that as she had no difficulty understanding the long, multiple-change recast, and that as she had explicit knowledge of how to use the passive voice, she noticed the gap and successfully repaired her utterance. As for why short single-change recasts appear to have more enhanced effect than long multiple-change recasts, Philp (2003) contends that long multiple-change recasts are beyond learners’ proficiency levels, or learners are not developmentally ready to notice those recasts. Mackey and Philp (1998) have also provided proof to claim that recasts are effective for advanced learners who have the knowledge and proficiency needed to notice recasts. The participants in the current study were all relatively higher-level learners, which must have contributed to their noticing of even long, multiple-change recasts.

5.2.4 Conclusion

The current study investigated the effects of recasts on learners’ noticing according to recast features. As previous research found, the stimulated recall comments indicated the difficulty of noticing grammatical recasts compared to lexical and phonological ones. This is an important implication for teachers in providing recasts to students. As for the effects of the degree of difference and the length of recasts, three participants noticed long and multiple-change recasts to the almost same degree as short and single-change recasts. This implies that, although it is generally accepted that short and single-change recasts are more noticeable in leading learners to repair, teachers may not have to be too worried about the
degree of difference and the length of recasts in providing them to relatively higher-level learners.

5.3 Summary of Chapter 5

Study 5 concluded that learner repair is an indicator of noticing, while mere acknowledgement is not. However, this should be considered cautiously. In concluding that counting repair is a valid measurement for the effectiveness of recasts, it is arguable that the results of the statistical analyses just showed that learners’ repair was significantly related to the existence of noticing, without strongly supporting the conclusion. In Study 6, analysis of three learners’ stimulated recall comments confirmed that the effects of recasts on learners’ noticing can be different according to error types (i.e., grammatical, lexical or phonological) but that is not the case of recast features (i.e., degree of change and length). However, I have to admit that there are some limitations in the studies. One of the great limitations is that the number of the participants was admittedly small. It can be argued that individual differences, such as proficiency level, working memory, grammatical sensitivity, and motivation can interact with learners’ ability to notice recasts. Future studies should be conducted with more participants of different English proficiency levels. If further investigation supports the findings and analyses of the results presented herein, recasts may become more effectively utilized in the Japanese EFL environments.
Chapter 6
Written Recasts

This chapter reports three studies. Study 7 (Sato, 2008a) examined the relationship between fluency and accuracy in Japanese high school students’ writing. Studies 8 (Sato, 2012b) and 9 (Sato, 2011) explored into the effects of written recasts on Japanese university students.

6.1 Study 7: The Relationship Between Fluency and Accuracy in Writing

6.1.1 Introduction

English education in Japan has focused on accuracy, and has always been intolerant of errors. One reason for this is that accuracy is expected of learners in tests (Yoshida, 2002). In writing classes, the primary focus has been on formal accuracy rather than fluency. Teachers usually employ controlled activities from authorized textbooks. Such activities included fill-in-the-blanks, sentence joining, item replacement, imitation, and manipulation of elaborately constructed model sentences aiming at acquiring sentence patterns, vocabulary and grammatical rules. However, as the importance of developing students’ communicative skills has been emphasized by our globalized society in which we have to learn and use English for the purpose of communication, fluency is becoming more and more important since it is a crucial factor in producing the language in real time (Ellis & Barkhuizen, 2005). When we take into consideration the fact that too much emphasis on accuracy hinders communication or fluency, we may have to move from accuracy-oriented to fluency-oriented
teaching. Yoshida mentions that learning to convey meaning and intentions even with mistakes is more important than simply knowing the correct forms. However, some educators and researchers question the effectiveness of, or the need for communication and fluency-oriented teaching. Saita (2003) analyzed the English proficiency of students who had studied English in a communication-oriented class in their junior high school and found that their English proficiency was much lower than former students who had studied English in a traditional accuracy-oriented class. Although communication-oriented teaching is becoming more and more popular, we can see a swing of the pendulum with regard to the importance of accuracy in grammar-oriented teaching. There seems to be a controversy over the transition from the traditional, accuracy-oriented English class to the fluency-oriented one. Therefore, a question arises as to whether accuracy is incompatible with fluency or not. It would be ideal if we could improve students’ English proficiency both in terms of accuracy and fluency. In this study we examine the relationship of accuracy to fluency specifically in Japanese high school students’ writing so that we can reconsider what the most effective teaching way to enhance their English proficiency would be.

6.1.2 Background

6.1.2.1 Accuracy

Accuracy is defined by Skehan (1996) as the extent to which the target language is produced in relation to the rule system and how well the learner can handle whatever level of interlanguage complexity he/she has achieved. Ellis (1987, 2003) mentions that accuracy requires syntactic processing with the availability of planning time. In writing, accuracy concerns how precisely the learner can write what he/she wants to write. We have seen that Japanese high school students tend to chase mainly grammatical accuracy in writing, trying not to make any mistakes so that their writing can obtain high scores in tests. Traditional
form-focused instruction such as “focus-on-forms” instruction, which places a focus on forms themselves in isolation, put more emphasis on accuracy than fluency (e.g., Long, 1991). Long (1991) mentions that this teaching is directed at teaching pre-selected grammatical items in activities where the students’ primary focus of attention is on form rather than meaning. In accuracy-oriented traditional instructional settings, grammatical items are presented and practiced in isolation, and errors are frequently corrected with accuracy given priority over meaning (Lightbown & Spada, 1993). However, Long (1991) proposes the need to incorporate traditional accuracy-oriented instruction into meaning-oriented communicative language teaching. Up until now, a number of L2 teachers and researchers have recognized the significance of meaning-oriented instruction which is termed “focus on form” (Muranoi, 2000).

6.1.2.2 Fluency

Fluency refers to learners’ ability to mobilize their system to communicate meaning in real time, prioritizing meaning over form, and is achieved when learners can exercise strategies to avoid or solve problems quickly (Ellis, 2003). Factors most likely to indicate fluency are as follows: in speaking, production without undue pausing or hesitation, and in writing, a high rate of production. Contrary to form-focused instruction aiming at developing accuracy, meaning-focused instructions are likely to enhance fluency (e.g., Long, 1991). In communicative activities based on meaning-focused instructions, “fluency in communication is what counts” (Wills, 1996, p. 24), where successful communication should be prioritized over grammatical accuracy (Hughes, 1989) and learners need to regard their errors in a positive way, considering themselves successful if the messages are communicated (Wills, 1996). Brown and Nation (1997) insist on the importance of meaning-focused activities to develop fluency by mentioning that learners should be provided with opportunities to practice
and use meaning focused-communication where they must both produce and listen to meaningful oral communication.

In an activity aimed at developing fluency, learners should be encouraged to use language that they already know without involving unknown vocabulary (Nation, 2001; Nation & Meara, 2002). Since many Japanese know a lot of language but do not know how to use it, their argument seems to be very important in the Japanese English learning environment.

6.1.2.3 The Relation Between Accuracy and Fluency

As for the relation between accuracy and fluency, there could be trade-offs in L2 learners’ production, meaning that when L2 learners attend to accuracy in their writing, it interferes with their ability to conceptualize, formulate, and articulate messages, preventing them from showing fluency (Ellis, 2003). Therefore a question could arise. “Which is more important, accuracy or fluency?” It seems that accuracy has been regarded as more important than fluency in the traditional Japanese EFL context in which students are learning English to pass an exam requiring learners to demonstrate correct knowledge and use of English. However, for successful communication to occur, fluency as well as accuracy is necessary as it is clear that sentences without either accuracy or fluency can hinder communication. That is, to enhance students’ English proficiency, both aspects must be fostered.

6.1.3 Purposes of the Study and Research Questions

As is mentioned in the previous sections, it may be difficult to foster both accuracy and fluency at the same time, and they may be incompatible with each other because of the trade-offs between them, though it is crucial to improve both. In the study, specifically focusing on writing, we examine the relations between accuracy and fluency in students’ performance in writing. We also examine whether writing tasks with directions to students to
focus on (1) accuracy, (2) fluency and (3) without direction affect their performances in the task. The following research questions (RQs) are examined.

RQ1. What kinds of relations are observed between accuracy and fluency in writing?
RQ2. To what extent does the direction affect students’ performances in writing?

6.1.4 Method
6.1.4.1 Participants

110 high school students (3 classes) in Hokkaido, Japan participated in the study. They had studied English in a foreign language classroom situation. Most of them intended to go to college and had a positive attitude toward studying English to pass the entrance exams for university. There was not a significant difference among the three classes in the result of the ANOVA test conducted on their scores in the term tests. The present researcher served as a teacher in the study.

6.1.4.2 Procedures
6.1.4.2.1 Training Session

This study was conducted in three regular intact high school classes. Before the experiment, the students went through training sessions. In these, the students practiced free writing three times in their different English class periods for 15 minutes each. In the sessions, one class was given the direction that their primary focus of attention was on form rather than meaning and that they should try not to make errors in writing (Accuracy-group, N=38). Another class was given the direction that their primary focus of attention was on meaning rather than form and that they should not be concerned about grammatical errors too much (Fluency-group, N=35). For the third class no direction was given in the writing activities.
(Non-Direction group, N=37). There were two main purposes for the sessions. The first one was to let students become accustomed to essay writing. In English writing classes, students had mainly experienced closed, controlled activities such as direct translation from Japanese to English, putting the primary focus on accuracy. They needed to be instructed on how they should write paragraphs or essays in English. At the beginning of the first training session, the teacher gave students a brief introduction about paragraph writing. The second purpose was to let students in the accuracy and fluency groups become accustomed to essay writing focusing on accuracy and fluency respectively. Topics of the writing practice sessions were, “My Family”, “My Hobby”, and “My Dream.” As these activities were preparation for the experiment, the writing was not evaluated by the teacher and no feedback was given to students.

6.1.4.2.2 Experiment

In the experiment, students were assigned to write an essay on the topic of “My Summer Vacation.” We regarded the topic as valid for the writing activity as it would not require students to exercise abilities beyond English such as creativity, imagination or intelligence. This is compatible with the statement that “we should test only writing ability and nothing else” (Hughes, 2003, p. 90). They were given the same directions as the training sessions: the Accuracy-group (AG) was asked to focus on accuracy, the Fluency-group (FG) on fluency, and the Non-Direction group (NDG) was given no direction. Students were given 30 minutes to complete the essay.
### Table 6.1: Directions given to the groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>38</td>
<td>Primary focus of attention was on form or “Accuracy”</td>
</tr>
<tr>
<td>FG</td>
<td>35</td>
<td>Primary focus of attention was on meaning or “Fluency”</td>
</tr>
<tr>
<td>NDG</td>
<td>37</td>
<td>No direction was given</td>
</tr>
</tbody>
</table>

#### 6.1.4.2.3 Scoring and Analysis

There seems to be a wide range of specific measures to quantify accuracy and fluency in learners’ production. In measuring accuracy, we calculated the proportion of the number of T-units without lexical and grammatical errors in the total number of T-units in the writing. This means that the denominator was the number of T-units and the numerator was the number of T-units which did not include lexical and grammatical errors. This measure was taken following previous studies (e.g., Wolfe-Quintero, Inagaki, & Kim, 1998), and we decided not to count errors related to the usage of the article as this is definitely difficult even for proficient learners. We also did not regard local spelling mistakes as errors. As for measuring fluency, the number of words written in the essay was counted for the current study. Although several different measurements have been used to score fluency in speech in previous studies (e.g., counting the number of words per minute, syllables, pauses, length of pauses, repetitions, false starts), Ellis and Barkhuizen (2005) mention that counting production rate is the only measurement to be applied to both speech and writing. In addition, counting the number of words written in the essay is in accordance with studies in which the number of words learners produced per minute of speaking was measured, such as Tong-Frederics’ study (1984).
6.1.5. Results

6.1.5.1 What Kinds of Relations are Observed Between Accuracy and Fluency in Writing? (RQ1)

To investigate the correlation of accuracy with fluency in writing, we examined Pearson’s correlation coefficients for each group. Table 6.2 shows that there was a weak correlation in the FG, a significantly weak correlation in the NDG, and little correlation in the AG.

Table 6.2: Pearson’s correlation coefficients of accuracy with fluency

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pearson’s correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>38</td>
<td>.023</td>
</tr>
<tr>
<td>FG</td>
<td>35</td>
<td>.234</td>
</tr>
<tr>
<td>NDG</td>
<td>37</td>
<td>.385*</td>
</tr>
</tbody>
</table>

*Note. Correlation is significant at the .05 level (2-tailed)*

6.1.5.2 To What Extent Does the Direction Affect Students’ Performances in Writing? (RQ2)

Table 6.3 shows that in Accuracy, the Non-Direction group obtained the highest scores followed by the Accuracy group and then the Fluency group. In Fluency, the Fluency group obtained the highest scores followed by the Non-Direction group and then the Accuracy group. SDs for fluency scores of each group were very large. To examine whether the direction affected students’ performances in writing, we used a one-way analysis of variance (ANOVA). The result for accuracy showed that there was no significant difference between the three groups (F (2,107) = 1.51, P = .23). As for fluency there was a significant difference between the three groups (F (2,107) = 4.79, P < .05).
Table 6.3: Descriptive Statistics of Accuracy and Fluency in the writing

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>38</td>
<td>56.3</td>
<td>15.6</td>
<td>80.2</td>
<td>35.2</td>
</tr>
<tr>
<td>FG</td>
<td>35</td>
<td>47.8</td>
<td>10.3</td>
<td>154.9</td>
<td>72.4</td>
</tr>
<tr>
<td>NDG</td>
<td>37</td>
<td>56.5</td>
<td>16.1</td>
<td>107.1</td>
<td>34.4</td>
</tr>
</tbody>
</table>

*Note. Scores of Accuracy are percentages and Fluency are the number of words.*

To further investigate the difference between the three groups, Tukey’s honestly significant difference test was performed as a post-hoc test as it was appropriate to examine the differences between each pair (AG-FG, FG-NDG, AG-NDG). Table 6.4 shows that there was a significant difference between the FG and the AG.

Table 6.4: Tukey’s HSD Test Differences Across the three groups

<table>
<thead>
<tr>
<th>Group</th>
<th>NDG</th>
<th>FG</th>
<th>AG</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>.505 ns</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>FG</td>
<td>.130 ns</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>NDG</td>
<td>.130 ns</td>
<td>.505 ns</td>
<td></td>
</tr>
</tbody>
</table>

6.1.6 Discussion

Three groups experienced writing activities under different conditions: the AG was required to be concerned with accuracy; the FG was encouraged to be fluent; the NDG was not given any direction. In the experiment, they wrote an essay under the same conditions as the training sessions so that we could examine whether directions would affect their writing.
performances. In terms of accuracy, the results showed that there was no significant difference among the groups. However, it was surprising that the NDG performed better than the AG. In the NDG, students did not have to choose which to prioritize, accuracy or fluency, but they may have put at least some importance on accuracy. Skehan (1998) mentions that when learners are left to themselves without being given guidance, they seem to focus on form. In the FG, students were supposed to be more concerned with fluency but they must not have given up accuracy. The interpretation of the result is that even the NDG and the FG must have thought or felt, consciously or unconsciously, that accuracy was important to some extent. Students in the AG must have prioritized accuracy, but increasing accuracy in writing could not have been an easy task because they could not perform beyond their ability (accuracy) with the exception of those who, intentionally or strategically, avoided using some words, expressions and grammatical items in which they did not have confidence. Japanese high school students usually have accuracy-oriented English classes, especially in writing classes where students are required to write correctly by using target expressions and grammatical items, which is crucial in written tests. We assume this learning environment was reflected in the results of the study.

As for fluency, there was a significant difference between the AG and the FG. Simply put, students in the FG performed best from the point of view of fluency. It must be true that it was not easy for the AG to increase accuracy, but it was not very difficult for the FG to increase fluency. The FG wrote the essay focusing not on accuracy but on meaning. Yet they did not sacrifice accuracy so much. This contrasted with the AG in which some of the students were very serious about accuracy, sacrificing fluency, with the lowest score in fluency and not the best in accuracy among the three groups. The results indicate that, in writing essays, directions from teachers have more influence on fluency than on accuracy, or simply put, they work like quick-acting medicine. Hence, we could argue that improving fluency, in essay
writing, is easier than improving accuracy, at least in the short term.

We examined the correlation of accuracy with fluency in writing for each group with Pearson’s correlation coefficients. The results showed that although there was not a high degree of correlation, there was a positive correlation for each group, with a significant positive correlation in the NDG. The results of weak or little correlation imply that some students who are fluent in writing may have problems in accuracy, and those who can write with accuracy may not be very fluent. However, from the fact that each group showed a positive correlation between accuracy and fluency, we cannot claim that improving students’ accuracy would inhibit fluency and that fluency would hinder accuracy. The result that the NDG showed the highest correlation between the three groups (r = .385) implies that students can strike a good balance between accuracy and fluency when they are not asked to be concerned only with accuracy or fluency.

6.1.7 Conclusion

The results of the study showed that students who were encouraged to be fluent showed a better performance, while students asked to be accurate did not show more accuracy than the other two groups. This implies that in essay writing direction or instruction aiming at improving fluency can be more influential than that aiming at accuracy. By combining this contention with the fact that English teaching in Japan has been accuracy-focused, often making light of fluency, we should be more fluency-oriented than we have been. We suggest that students should be provided with more opportunities for communication, primarily focusing not on form but on meaning as VanPatten (1993) mentions that learners must have some opportunity to develop fluency and to increase accuracy. Japanese high school learners, who currently learn in an accuracy-focused environment, are likely to be too afraid of making mistakes hindering fluency or communication. We suggest that teachers should sometimes be
more generous toward their errors and mistakes in improving fluency. This does not mean we should make light of accuracy. The point is that we have to deal with both fluency and accuracy and continue working on each, sometimes emphasizing one, the other, or ideally both according to the purpose of the class, as both are closely related and necessary for successful communication.

As for the relation between accuracy and fluency, these two language skills do not compete with each other regardless of the directions given. From the results we could argue that it is crucial and plausible to improve both aspects in students’ production. Traditionally, or still now, we have focused much more on accuracy than fluency in Japan (e.g., Yoshida, 2002). However, fluency as well as accuracy is indispensable for real communication. It is not accuracy or fluency, but accuracy and fluency which are crucial in production. As we found in this study that there was positive correlation between the two, we could argue that fluency does not hinder but may encourage accuracy, and that accuracy does not hinder but may encourage fluency. Accuracy and fluency are not contradictory at all but rather two compatible elements toward the enhancement of English proficiency.

Before concluding this study, the limitations of the study must be noted. The first limitation is the length and the frequency of the training sessions. Students went through three training sessions, in total of 45 minutes, before the experiment. However, one could argue that the training they were exposed to was not sufficient to have an effect on the experiment. More sessions with much more time may be needed. The second and the main limitation of the study is its sample size. Ideally we should have more subjects from different schools with different English proficiency levels. To confirm the findings of the study, a further study with more samples is needed.

6.2 Study 8: The Effects of Written Feedback in the Form of Recasts
Study 7 implied that accuracy and fluency in Japanese high school students’ writing may not compete with each other. In Study 8 (study based on Sato, 2012b), the effects of written recasts on learners’ revision of the first draft are examined from some aspects, including the relation between accuracy and fluency.

6.2.1 Purpose of the Study

It seems that there is an agreement that learners demonstrate improvement in their writing in a second draft on the same topic after being given corrective written feedback. (e.g., Ellis et al., 2008; Ferris, 1999, 2004; Truscott, 1996, 1999). In the current study, which was conducted with Japanese university students, examines the effectiveness of written feedback in the form of recasts by measuring: to what extent learners would repair their errors or mistakes; the development of accuracy, fluency and complexity in writing; and the correlation between accuracy and fluency. In addition, the assumption that the students’ view of error correction may influence their success in the writing class (Ferris, 2004) motivated us to examine students’ attitudes and affective aspects toward written corrective feedback and their correlation with successful revision. The following seven research questions were operationalized.

RQ1. Are written recasts noticed, leading Japanese EFL students to repair in the text revision?
RQ2. How effective are written recasts for Japanese EFL students according to error types?
RQ3. How effective are written recasts for Japanese EFL students according to the degree of differences?
RQ4. How effective are written recasts for Japanese EFL students according to the lengths of the recasts?
RQ5. Do written recasts contribute to the development of accuracy, fluency and complexity in
RQ6. Do correlations of accuracy with fluency in the writing change between the first draft and the revised draft after learners are provided written recasts?

RQ7. Do attitudes and affective factors toward written feedback influence students’ performance in the text revision?

6.2.2 Method

6.2.2.1 The Research Context

English has long been taught as a knowledge-based subject in Japanese junior and senior high school. For many learners, passing of knowledge-based exams is the primary objective. It is said that Japanese learners have dual orientations for learning English: a practical, realistic goal related to examinations and grades, and a vague idealistic goal related to using English for international or intercultural communication (Yashima, 2000). It seems that most junior and senior high school learners have the former type of motivation (related to tests) more than the latter (related to communication) in the Japanese EFL situation (Yashima, Zenuk-Nishide, & Shimizu, 2004). The data were collected in an English class titled “Foreign Language Communication” in a national university in an urban area in western Japan. The purpose of the English class is to improve integrated skills of reading, writing, listening and speaking in English.

6.2.2.2 Participants

The class was composed of 27 second-year students. 12 were male and 15 female who were between 19 and 21 years old. All of them belonged to the department of teacher training and school education, and their majors were mathematics, science, or pedagogy. Although they were not majoring in English, they could be regarded as at least low-intermediate level
students as they would have had to pass the entrance examinations of the national university by attaining relatively high scores on the English portion of the test. The Japanese EFL teacher who taught the class, and is the researcher of the study, had taught English for more than 15 years and was in the third year of employment at the university at the time of this study. Two students who were absent from either the first or second week of the class were excluded in the study.

6.2.2.3 Procedures

In the first class after summer vacation in 2010, students were assigned to write an essay on the topic of “My Summer Vacation.” The topic was regarded as valid for the writing activity as it would not require students to exercise abilities beyond English such as creativity, imagination or intelligence. This is compatible with the statement that “we should test only writing ability and nothing else” (Hughes, 2003, p. 90). Students were not given any direction on whether they should focus on accuracy or fluency. They were given 30 minutes to complete the essay and were not allowed to use a dictionary. After they submitted the essay, the rest time of the class time was spent with students engaged in listening, reading and speaking activities which were not a part of this study.

The teacher-researcher wrote written recasts in the blank space of each essay. On average 5 recasts were given to each of the students with a minimum of 2 (two students) and a maximum of 9 (one student).

There was no target focus in providing recasts in the study. Though Bitchener (2008) argues that there should be only one or a few categories for providing feedback to prevent information overload, it was assumed that this would be impractical in actual classroom settings: Students, in general, want to improve overall accuracy in writing (Hartshorn et al., 2010); Focusing on one or a few error categories may lead to students neglecting other areas
Written recasts were provided randomly depending mainly on the teacher’s common sense intuitions and experience so that students could revise the first draft well enough to improve the overall quality of the writing as is usually done in EFL classroom settings.

In the second class, one week after the first class, each of the essays was given back to the students. Students were asked to read through the feedback for the text revision and given 20 minutes to revise the essay. After they completed the second draft, they were asked to complete an exit questionnaire. This was to examine students’ attitudes and affective factors toward written corrective feedback and their correlation with repair.

6.2.2.4 Analysis

6.2.2.4. 1 Classification of Written Recasts

In order to examine the effectiveness of recasts according to types, recasts were categorized as recasts given to learners’: (1) grammatical errors; (2) lexical errors, (3) unsolicited use of Japanese following Lyster and Ranta (1997). Grammatical errors are errors in the use or lack of determiners, particles, verb forms, word order; Lexical errors include inappropriate, imprecise or inaccurate choices of lexical items; unsolicited use of Japanese is an instance where a student writes Japanese instead of English. In addition, recasts given to (4) spelling errors and (5) contents were examined. Content recasts were provided to an expression(s) whose meaning(s) is (are) vague or awkward. The following are examples according to types. Changes were written in bold and will be explained later.

Example (1) Grammatical recast.

S1: It is beautiful. → (written recast) Oh, it was very beautiful.
Example (2) Lexical recast

S2: In the car I saw a dream. → (written recast) You **had** a dream in the car?

Example (3) Recast to unsolicited use of L1

S3: We ate a lot of *Ika* (squid in Japanese) in Hakodate.

→ (written recast) Oh, you ate a lot of **squids**!

Example (4) Recast to spelling error

S4: I talked with a *foreigner* → (written recast) You **had a talk** with a **foreigner**!

Example (5) Content recast

S5: We lost the games. → (written recast) You lost **all of** the games?

In only one case was a recast given to grammatical and lexical errors, as the following, and it was excluded in the analysis.

**S**: It is heavy. → (written recast) Oh, it **was hard**.

Recasts were also categorized according to the degree of differences and lengths following the parameters of a previous study (e.g., Philp, 2003; Sato, 2006, 2009a). To examine the effects of the degree of difference between the learner’s initial writing and the written recast, the number of changes was counted and coded following Philp (2003), but for the study, recasts were divided into two categories according to whether the recast had only a single change or more than one change. This decision was made referring to Sato (2006,
2009) which revealed that recasts with more than one change were less likely to be noticed by
the Japanese learners. Conversion of the subject was not counted as a change and inversion
counted as one change. Exclamation and interjection were not counted. The following
example was counted as one change.

Example (6) Grammatical recast

S6: Kourijima is small island. → (written recast) Oh, it is a small island.

Examples (1) and (5) were counted as two changes; examples (2) and (3), as one change;
example (4), as four changes.

As for the lengths, written recasts were categorized into long or short ones according to
the number of morphemes, based on Philp (2003) and Sato (2006, 2009): recasts with more
than five morphemes were coded as long. Example (7) was counted as short, while (8) was
counted as long.

Example (7) Short recast (lexical, one change)

S7: I pointed an umbrella. → (written recast) Oh, you opened an umbrella.

Example (8) Long recast (grammatical, four changes)

S8: I don’t know what should I teach to child then.

→ (written recast) OK, you didn’t know what you should teach to children.

Students’ oral response to oral feedback is called uptake. Lyster and Ranta (1997) defined
uptake as “a student utterance that immediately follows the teacher’s feedback and that
constitutes a reaction in some way to the teacher’s intention to draw attention to some aspect
of the student’s initial utterance” (p. 48). Uptake can be either repair, which is modified output that corrects the initial error, or needs repair, which is modified output that does not correct the initial error (Lyster and Ranta, 1997).

There is an argument that uptake is not important because it can be mere parroting of the correct form provided by the teacher (Ostovar, 2010). Ellis and Sheen (2006) pointed out that repair can be an indicator of noticing but noticing can also take place without uptake. However, it has been argued that modified output plays an important role in the L2 learning process (e.g., McDonough, 2005; Shehadeh, 2002; Swain, 1985, 1995, 1998). Swain’s (1995) Output Hypothesis insists on learners’ production of the correct form because: it helps learners move somewhat beyond learners’ current ability; and it helps teachers make sure that their correction has been noticed by the student. Some studies also have found that uptake is one of the crucial indicators of students’ L2 learning (e.g., Loewen, 2004). Drawing on previous studies that insist on the importance of modified output in L2 learning (e.g., Gass, 2003; Izumi, 2002; McDonough, 2005; Shehadeh, 2002; Swain, 1985, 1995, 1998; Loewen, 2004), students’ correct written repair was measured in the study. When students’ errors, mistakes or inappropriate expressions to which recasts were given, were corrected in the revision, it was counted as successful (repair) and rewarded one point. If they failed to make the revision, it was counted as failed and a point was not given. We computed success rates. In the situation when students decided not to use original utterances to which recasts were given, it was excluded in calculating the success rates. The following are examples of a successful revision, a failed revision and one excluded in calculating the success rates.

Example (9) Successful
S9: I thought it was necessary. → (written recast) Yes. It was necessary.
(Student’s revision) → I thought it was necessary.
Example (10) Failed.

S10: I was belonged to the club. → (written recast) Oh, you belonged to the team.

(Student’s revision)→I was belonged to the team.

Example (11) Excluded

S11: I saw their swimming in the sea.→ (written recast) You saw them swimming in the sea?

(Student’s revision)→My friends began swim in the sea.

In example 11, the student produced ill-formed output. However, it was not counted as failed but excluded, because whether he noticed the recast or not is unclear as he did not use the same structure in the revision.

I conducted classification and categorization of written recasts. A week after the first classification, I conducted it again. This method of classification follows Alderson et al. (1995), which explains that multiple rating sessions increases the reliability of the rating. Where there were discrepancies between the two ratings (4 cases), a second rater was invited to rate them. After discussion, the disagreement was resolved.

6.2.2.4.2 Writing Accuracy, Fluency and Complexity

Though there seems to be many measures to quantify accuracy, the proportion of the number of T-units without lexical and grammatical errors in the total number of T-units in the writing was calculated. This means that the denominator was the number of T-units and the numerator was the number of T-units which did not include lexical and grammatical errors. This measure was taken in accordance with previous studies (e.g., Wolfe-Quintero, Inagaki, &
Kim, 1998), and it was felt that this would give us reliable results. We decided not to count
errors related to the usage of articles as they present difficulties even for proficient learners. In
measuring fluency, the number of words written in the essay was counted for the current study,
as is rationalized in Wolfe-Quintero et al (1998). Ellis and Barkhuizen (2005) mention that
counting production rate is the measurement to be applied to writing. As for measuring
complexity, though it has been defined many ways, it was decided to measure the mean length
of T-unit by calculating the average number of words per T-unit following previous studies
such as Ortega (2003) and Wolfe-Quintero et al (1998). In the relation of the three aspects, it
was decided to examine whether or not there are trade-offs between accuracy and fluency in
writing referring to Ellis (2003) and Sato (2008).

6.2.2.4.3 Questionnaire Results and Students’ Writing Performance

In the questionnaire, the following five questions were asked (see Appendix D):

Q. (1) Do you think written feedback from the teacher is important?
Q. (2) Did you refer to the written feedback in revising the text?
Q. (3) Do you want to be given written feedback from the teacher?
Q. (4) Did you understand the written feedback given to your essay?
Q. (5) Write freely about written feedback.

They were asked to write a number from 1 (most strongly disagree) to five (most strongly
agree) for questions (1) to (4). In cases when they wrote either 1 or 5, students were asked to
write a reason. Directions were written in Japanese and comments were given in Japanese on
question (5). The numbers chosen by the students were counted as their scores. Correlations
of success rates with scores of Q (1), Q (2), Q (3) and Q (4) each respectively were examined.
In addition, the correlation of success rates with scores of \( Q(1) + (2) \) was examined, which was motivated by the assumption that if learners regard written feedback as important for the improvement of their writing and then actually make use of them, they would be more likely to show repair. Students’ free comments about written feedback were qualitatively analyzed.

6.2.3 Results

6.2.3.1 Success Rates of Recasts According to Types.

In total, 125 written recasts were recorded. Grammatical recasts were made 81 times: Lexical recasts, 17 times; Recasts to unsolicited use of L1, 11 times; Recasts to spelling error, 6 times; Content recasts; 10 times. As for the lengths, long recasts were recorded 81 times and short recasts were made 44 times. About the degree of differences, single change recasts were recorded 48 times, and multiple change recasts were recorded 77 times. Table 6.5 summarizes the number of recasts, repairs, failed revisions, avoided revisions and success rates according to error types; Table 6.6 shows the results according to the differences; Table 6.7 shows the results according to the lengths.

Table 6.5: Number of recasts, repairs, failed revisions, avoided revisions and success rates by error types

<table>
<thead>
<tr>
<th>Types</th>
<th>Frequency</th>
<th>Repair</th>
<th>Failed</th>
<th>Avoided</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical</td>
<td>81</td>
<td>43</td>
<td>31</td>
<td>7</td>
<td>58%</td>
</tr>
<tr>
<td>Lexical</td>
<td>17</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>60%</td>
</tr>
<tr>
<td>L1 use</td>
<td>11</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>90%</td>
</tr>
<tr>
<td>Spelling error</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>67%</td>
</tr>
<tr>
<td>Contents</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>70</td>
<td>43</td>
<td>12</td>
<td>62%</td>
</tr>
</tbody>
</table>
Table 6.6: Number of single change recasts, multiple change recasts, repair, failed revisions, avoided revisions and success rates

<table>
<thead>
<tr>
<th>Types</th>
<th>Frequency</th>
<th>Repair</th>
<th>Failed</th>
<th>Avoided</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single change</td>
<td>48</td>
<td>28</td>
<td>16</td>
<td>4</td>
<td>64%</td>
</tr>
<tr>
<td>Multiple</td>
<td>77</td>
<td>42</td>
<td>27</td>
<td>8</td>
<td>61%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
<td><strong>70</strong></td>
<td><strong>43</strong></td>
<td><strong>12</strong></td>
<td><strong>62%</strong></td>
</tr>
</tbody>
</table>

Table 6.7: Number of long and short recasts, repair, failed revisions, avoided revisions and success rates

<table>
<thead>
<tr>
<th>Types</th>
<th>Frequency</th>
<th>Repair</th>
<th>Failed</th>
<th>Avoided</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short</td>
<td>44</td>
<td>23</td>
<td>17</td>
<td>4</td>
<td>58%</td>
</tr>
<tr>
<td>Long</td>
<td>81</td>
<td>47</td>
<td>26</td>
<td>8</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
<td><strong>70</strong></td>
<td><strong>43</strong></td>
<td><strong>12</strong></td>
<td><strong>62%</strong></td>
</tr>
</tbody>
</table>

To answer the first research question (RQ (1) Are written recasts noticed, leading Japanese EFL students to repair in the text revision?) we calculated the success rate. 70 written recasts successfully led students to repair and 43 failed. In 12 cases students did not use the same structures, words or expressions to which the recasts were given, and were excluded in calculating the success rates. The success rate calculated was 62%. To examine whether there was a statistical difference between the number of repairs (70) and failed revisions (43), a chi-square statistic with Yates’ continuity correction was calculated, finding a significant difference between them. \( \chi^2 = 6.45, df = 1, p < .05 \).

The second research question asked about the success rates of written recasts according to their types (RQ (2) How effective are written recasts for Japanese EFL students according to error types?). Among 125 written recasts in total, grammatical recasts occurred 81 times with
a 58% success rate (43 repairs, 31 failed revisions, 7 avoided revisions), lexical recasts occurred 17 times with a 60% success rate (10 repairs, 5 failed revisions, 2 avoided revisions), L1 use recasts occurred 11 times with a 90% success rate (9 repairs, 1 failed revision, 1 avoided revision), spelling error recasts occurred 6 times with a 67% success rate (4 repairs, 2 failed revisions, and one avoided revision that was not recorded), and contents recasts occurred 10 times with a 50% success rate (4 repairs, 4 failed revisions, 2 avoided revisions). A chi-square statistic with Yates’ continuity correction revealed there was a significant difference between the number of repair and failed revisions only in L1 use ($\chi^2 = 6.40$, df = 1, p < .05).

The third research question concerned the success rates according to the degree of difference between the learner’s initial writing and the written recast (RQ (3) How effective are written recasts for Japanese EFL students according to the degree of differences?). It was reported that single change recasts occurred 48 times with a 64% success rate (28 repairs, 16 failed revisions, 4 avoided revisions) and that multiple change recasts occurred 77 times with a 61% success rate (42 repairs, 27 failed revisions, 8 avoided revisions). A chi-square statistic test with Yates’ continuity correction revealed that there was not a statistically significant difference in the success rates between single change recasts and multiple change recasts.

The fourth research question asked whether there is a difference in the success rates according to the lengths of written recasts (RQ (4) How effective are written recasts for Japanese EFL students according to length?). It was recorded that short recasts with five morphemes or less occurred 44 times with a 58% success rate (23 repairs, 17 failed revisions, 4 avoided revisions) and that long recasts with more than five morphemes occurred 81 times with a 64% success rate (47 repairs, 26 failed revisions, 8 avoided revisions). A chi-square statistic test with Yates’ continuity correction revealed that there was not a statistically significant difference in the success rates between short recasts and long recasts.
6.2.3.2 Accuracy, Fluency and Complexity

The fifth research question concerned the development of accuracy, fluency and complexity from the first draft to the second draft (RQ (5) Do written recasts contribute to the development of accuracy, fluency and complexity in the text revision?). Mean scores of accuracy, fluency and complexity improved, and there were statistically significant differences between the first draft and the second draft in fluency ($t(24) = -6.55, p < .05$) and complexity ($t(24) = -4.53, p < .05$). However, that was not the case in accuracy ($t(24) = -1.1, n.s.$). Table 6.8 summarizes the results.

Table 6.8: Mean scores and SDs of accuracy, fluency and complexity in the first and second drafts

<table>
<thead>
<tr>
<th></th>
<th>Accuracy</th>
<th>Fluency</th>
<th>Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>First draft</td>
<td>59.8</td>
<td>13.7</td>
<td>120.3</td>
</tr>
<tr>
<td>Second draft</td>
<td>62.8</td>
<td>15.3</td>
<td>139.1</td>
</tr>
</tbody>
</table>

Note. Accuracy score is the proportion (%) of the number of T-units without lexical and grammatical errors in the total number of T-units in the writing. Fluency score is the number of words written in the essay. Complexity score is the average number of words per T-unit.

Research question 6 concerned trade-offs of accuracy and fluency in writing (RQ (6) Do corrections of accuracy with fluency in the writing change between the first draft and the revised draft after being provided written recasts?). To investigate the correlation of accuracy with fluency in writing, we examined Pearson’s correlation coefficients. As table 6.9 shows, in the first writing, little correlation was observed, but in the second writing, a weak correlation was observed.
Table 6.9: Pearson’s correlation coefficients of accuracy with fluency

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Pearson’s correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>First draft</td>
<td>25</td>
<td>.148</td>
</tr>
<tr>
<td>Second draft</td>
<td>25</td>
<td>.380*</td>
</tr>
</tbody>
</table>

Correlation is significant at the .05 level (2-tailed)

6.2.3.3 Questionnaire Results

Research question 7 concerned students’ affective factors and perception of written feedback, and their influence on writing performances in the second draft (RQ (7) Do affective factors influence students’ performance in the text revision?). In the questionnaire, a Likert-scale measurement with a maximum point score of five was conducted in four questions. To investigate the correlation of each score and to what extent students successfully revised in the second draft, we examined Pearson’s correlation coefficients. Table 6.10 shows the results.

Table 6.10: Average scores and correlations with the success rates

<table>
<thead>
<tr>
<th>Questions</th>
<th>Average points</th>
<th>SD</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Whether they think written feedback is important</td>
<td>4.04</td>
<td>.73</td>
<td>.267</td>
</tr>
<tr>
<td>2. Whether they referred to the written feedback</td>
<td>4.14</td>
<td>.83</td>
<td>.354</td>
</tr>
<tr>
<td>3. Whether they wanted to be provided with written feedback</td>
<td>3.79</td>
<td>.82</td>
<td>.038</td>
</tr>
<tr>
<td>4. Whether they understood the written feedback</td>
<td>4.0</td>
<td>.68</td>
<td>.222</td>
</tr>
</tbody>
</table>

All of the questions obtained relatively high scores. Pearson’s correlation coefficients demonstrated a low degree of correlations in 1, 2, and 4, but it did not show a correlation in 3. As further investigation, the scores of 1 and 2 by each student were combined, and then
correlation with the success rates was calculated. This was motivated by the assumption that if learners think written feedback is important for the improvement of the writing and then actually make use of them, they would be more likely to show repair. As table 6.11 shows, there was a significant moderate correlation between them ($r = .400$).

Table 6.11: Average scores of Q1 and 2 combined and correlations with the success rates

<table>
<thead>
<tr>
<th>Questions</th>
<th>Average points</th>
<th>SD</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Whether they think written feedback is important combined” (1) combined with “Whether they referred to the written feedback” (2)</td>
<td>8.20</td>
<td>1.28</td>
<td>.400*</td>
</tr>
</tbody>
</table>

Correlation is significant at the .05 level (2-tailed)

6.2.4 Discussion

6.2.4.1 Success Rates of Recasts According to Types

It was found that students were more likely to show repair to written recasts than not. A 62% success rate is higher than those of oral recasts examined previously (e.g., Lyster and Ranta, 1997). It is assumed that written recasts are more effective than oral recasts in leading learners to repair their erroneous production. Eight students mentioned in the free comments that they found they had made mistakes or errors when they read written recasts and revised their work. Four students wrote in the comments that they found they had not yet learned the correct grammatical knowledge about the structures and that by reading the recasts they learned the grammatical rules correctly. From this, we could say that written recasts activated students’ previously existing learned systems and partially acquired knowledge. In addition, in some cases, written recasts provided students with opportunities to learn new languages. One student wrote in his comments that by reading a recast he learned how to write what he had
wanted to write but couldn’t. In the situation, the student was able to fill the gap between what he wanted to write and what he actually wrote after referring to a written recast.

Variation of success rates by the error types means the effectiveness of recasts varies according to the types. Recasts to L1 use recorded the highest success rate, then recasts to spelling errors, followed by lexical recasts, grammatical recasts and content recasts (L1, 90% > S, 67% > Lex, 60% > G, 58% > C, 50%). This is similar to Sato (2009a) which compared the effectiveness of oral recasts according to the types. As the reason that L1 recasts led to the highest success rate, we can point out its salience as is the case in oral recasts (Sato, 2009a). In the first draft when students used the Japanese language, they found interlanguage deficiency or a lack of knowledge. In reading written feedback it was easy for them to find the English equivalents of what had been written in Japanese, so that they could use them just by changing the Japanese to English. The lowest success rate of content recasts can be attributed to their vagueness. Content recasts were provided to an expression(s) whose meaning(s) was (were) vague or awkward. However, although content recasts had corrective intent, students often must have perceived them as confirmation, paraphrasing or just brief comments.

Example (12) Content recasts
S12: I played tennis every day, six days a week.
→ (written recast) Oh, You played tennis very hard, almost every day.
(There was no revision from the student.)

In this case, we can assume that the student perceived the recasts not as corrective feedback but as a brief comment from the teacher, as is evidenced by his comment that he could not understand the purpose of some written recasts. Grammatical recasts also recorded a lower success rate than the total success rate (62%). This result is compatible with previous studies.
on oral recasts (e.g., Kim & Han, 2007; Sato, 2009a; Trofimovich, Ammar, & Gatbonton, 2007; Williams, 1999). Trofimovich et al. (2007) suggested that students should already have knowledge of the form so that they can notice their own errors through recasts and to reformulate them after recasts. This argument could be partially applied to written recasts in this study. It can be assumed that some students could not show repair because of a lack of knowledge on the form to benefit from the enhancing effect of recasts, even though they were not oral but written ones.

The results revealed that effects of written recasts are not affected by the length or the degree of difference between the learner’s initial writing and the written recast. One unexpected finding is that long recasts recorded a higher success rate than short recasts. These findings are incompatible with previous studies (e.g., Philp, 2003; Sato, 2006, 2009a) which showed shorter and single change oral recasts are better noticed, leading to learners’ repair. As to the possible reasons for this, it is interpreted that even written long recasts with multiple changes can let learners repair their previous erroneous production regardless of their limitation of working memory. Unlike oral feedback, written feedback was not fleeting and thus enabled students to trace it back by reading (Payne & Whitney, 2002). This nature of written feedback was beneficial enough for students with shorter working memory or difficulty in maintaining information in memory to utilize not only short-single change recasts but long multiple change recasts. A student’s comment that she repeatedly read the written recasts to repair her errors confirms this interpretation.

6.2.4.2 Accuracy, Fluency and Complexity

From the first draft to the second draft, accuracy, fluency and complexity developed in the writing. This is consistent with the argument that written corrective feedback is beneficial in editing in revision (e.g., Ashwell, 2000; Ferris & Roberts, 2001; Truscott, 1996, 1999, 2007).
In the second writing, as students did not have to think about the contents again, some of them wrote additional information in the revision, contributing to the statistically significant development in fluency that was measured by the total number of words written in the second draft. This less cognitive load (in that they did not have to think about what to write) also encouraged them to write more complex sentences, resulting in statistically significant development in complexity. However, in writing additional information and complex sentences, errors and mistakes naturally occurred. This can be the reason that the development of accuracy was not statistically significant.

As for the trade-off effect between accuracy and fluency in writing, the correlation between the two was little in the first draft, but a significant weak correlation was observed in the second draft. This means that the extent of trade-offs decreased with the correlation of accuracy and fluency improving in the second draft. A higher correlation of the two in the second draft is thought to be due to students’ making revisions while referring to the written recasts contributing to the development of both accuracy and fluency. That is to say, better-balanced writing. One student mentioned in the comments that she used written recasts as the models and also added other expressions in the revision of original erroneous production. It can be assumed that written recasts provided the opportunity where students could repair their errors and mistakes, sometimes with additional words and expressions as the following example shows.

Example (13) Grammatical recast

S13: I enjoyed sing song.

→ (written recast) You enjoyed singing songs.

→ (Student’s revision) I enjoyed singing songs with children this summer.
This type of revision resulted in a higher accuracy and fluency score and a higher correlation of the two.

6.2.4.3 Questionnaire Results

Questionnaire results revealed that written recasts were generally preferably accepted by the students, supporting previous studies (e.g., Nugrahenny, 2007; Saito, 1994). Looking at the correlations of the success rates with the results of each question, questions (1) (whether feedback is important or not), (2) (whether they referred to the feedback), and (4) (whether they understand the feedback) demonstrated a low correlation with the success rate. However, question (3) (whether they want written feedback) did not show correlation with the success rate. The result implies that whether or not learners want to be given feedback does not affect their performance in revising their writing. The following comment written by a student can justify the interpretation.

Excerpt 1: Comment by Takuma

“I do not want to be given feedback, because it’s hard to read and understand. But once it is given I would read and use it to correct my errors.”

A significant moderate correlation ($r = .400$) between the combined scores of questions (1) and (2), and its correlation with the success rate imply that if learners consider written feedback as important in actually using it, they are more likely to successfully repair their

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8 All names are pseudonymous.

9 Student’s quotations are translated by the researcher with a deliberate effort to retain the original meaning written in Japanese.
errors and mistakes.

In the free comments, most of the students expressed their willingness to accept and utilize written feedback for the revision, which is compatible with the questionnaire results.

Excerpt 2: Comment by Sayaka
“I felt happy to know that the teacher read my writing attentively, and thanks to feedback my essay improved.”

Excerpt 3: Comment by Tomoka
“I really appreciate feedback, without which I could not have rewritten my essay. Thank you very much for reading my essay carefully and giving me feedback.”

Excerpt 4: Comment by Mitsuhiro
“As I was given a lot of feedback, I knew that my essay was read with great care by the teacher. I was highly motivated to rewrite better.”

Comments, such as Excerpts 2, 3, and 4, showed students’ appreciation for their essays being read by the teacher. This implies written feedback would affect not only technical aspects in revising the essay but affective factors as well.

However, one issue was implied: Written feedback may not be so beneficial to low-level learners or those who cannot write much. The following is a comment by a student who wrote only 28 words in the first draft.

Excerpt 5: Comment by Yutaka
“I wrote just a small number of words in the first draft. So there were only two comments. The comments did not seem to be relevant to my writing.”

In the following Excerpt 6, the student used written feedback without understanding the meaning. In a situation like this, as Truscott (1996, 1999, 2007) argue, learning may not have happened.

Excerpt 6: Comment by Ikuko

“I didn’t know whether English expressions written by the teacher were what I had wanted to write in the first draft, but anyway I copied them in the revision.”

Considering that the questionnaire score of question (4) that asked whether they understood the feedback is the second lowest among the four questions, and the correlation between the score of question (4) and the success rate was also the second lowest, it is conceivable that written feedback may not be so beneficial for low-level learners. Other students commented the following:

Excerpt 7: Comment by Shin

“As I originally don’t like writing an essay in English, it bothered me to write again by referring to feedback.”

Excerpt 8: Comment by Yuka

“I don’t like writing and reading English very much. When I saw my essay returned with a lot of feedback and was asked to rewrite by using feedback, I didn’t feel like doing it.”
For those who do not like to study English or non-motivated learners, written feedback can work the other way: It can demotivate students. We have to examine the effect of written feedback according to learners’ English proficiency and motivation.

6.2.5 Conclusion

This study found that written feedback in the form of recasting is beneficial for learners to notice their errors or mistakes leading them to repair. The quality of the writing from the points of accuracy, fluency and complexity would improve in the second draft written with the help of feedback. The findings reported are suggestive in that as recasts are not intrusive as explicit correction (e.g., Doughty, 2001) we can utilize the beneficial effects of written recasts for Japanese learners who often have difficulty writing essays in English.

6.3 Study 9: Examining the Effectiveness of Written Recasts Determined by Grammatical Difficulty

6.3.1 Purpose of the Study

Previous studies reported that recasts to learners’ grammatical errors were more frequently provided than to any other error types, but that the success rate in grammatical recast, measured by learners’ repair (correct reformulation of an error occurring after recasts), was the lowest (e.g., Kim & Han, 2007; Sato, 2009a; Williams, 1999). This study (Sato, 2011b) is designed to examine the effectiveness of written recasts to grammatical errors and whether there is a difference of effects in recasting as written feedback according to grammatical difficulty with university students’ text revision.
6.3.2 Method

6.3.2.1 Participants and Procedure

Participants and procedures are the same as ones in Study 8: Data obtained in Study 8 were used to be analyzed for the purposes of this study.

6.3.2.2 Data Analysis

In categorizing grammatical items as easy or difficult, Categorizations A and B were used for the analysis, as is done in Study 3 (Chapter 4). Categorization A is:

Early developmental (easy):
1. Definite article (the)  2. Irregular past tense  3. Plural S

Late developmental (difficult):
1. Indefinite article (a, an)  2. Regular past tense  3. Relative clauses
4. Active & passive voice  5. Third person singular S

Categorization B is:

Early developmental (easy):

Late developmental (difficult):
1. Irregular past tense  2. Regular past tense  3. Third person singular S
4. Articles (a/the)

The following are examples of grammatical recasts according to early (easy) or late (difficult) development.

Example1 Definite article, the (early in A, late in B)
Example 1
S1: I belonged to team.
→ (written recast) Oh, you belonged to the team.
→ (Student’s revision) I belonged to the team. (successful)

Example 2 Irregular past tense (early in A, late in B)
S2: I take many pictures in Hokkaido.
→ (written recast) Oh, you took many beautiful pictures.
→ (Student’s revision) I take many beautiful pictures in Hakodate. (failed)

Example 3 Plural S (early in A and B)
S3: There were many elementary school student in the camp.
→ (written recasts) You had a lot of students.
→ (Student’s revision) I had a lot of student in the camp. (failed)

Example 4 Indefinite article, a, an (late in A and B)
S4: Every morning we ate apple because it is healthy.
→ (written recasts) You ate an apple every morning.
→ (Student’s revision) I ate an apple every morning. (successful)

Example 5 Regular past tense (late in A and B)
S5: In Tokyo, my friend and I watch the movie.
→ (written recasts) Oh, you watched the movie.
→ (Student’s revision) In Tokyo, my friend and I watched the movie. (successful)
Example 6 Relative clause (late in A)

S6: We went to Hokkaido where had a lot of delicious foods.
   → (written recasts) Yes. It is a nice place that has delicious foods.
   → (Student’s revision) We went to Hokkaido that had a lot of delicious foods.
      (successful)

Example 7 Active and passive voice (late in A)

S7: The tall building constructed 30 years ago.
   → (written recasts) Oh, it was constructed 30 years ago!
   → (Student’s revision) The tall building constructed 30 years ago. (failed)

Example 8 Active and passive voice (late in A)

S8: The dog was had by his family.
   → (written recasts) His family had the dog.
   → (Student’s revision) His family had the dog. (successful)

Example 9 Third person singular S (late in A and B)

S9: My father always ask me to study hard.
   → (written recasts) Oh, he asks you to study harder.
   → (Student’s revision) My father always asks me to study hard. (successful)

Example 10 Progressive (-ing) (early in B)

S10: I slept when she telephoned me.
   → (written recasts) Oh, you were sleeping when she called you.
   → (Student’s revision) I was sleeping when she called me. (successful)
Example 11 Be copula (early in B)

S11: My friend and I was very tired.
→ (written recasts) Oh, you were very tired.
→ (Student’s revision) My friend and I was very tired. (failed)

Example 12 Be auxiliary (early in B)

S12: We must kind to children.
→ (written recasts) Yes. You must be kind to children.
→ (Student’s revision) We must be kind to children. (successful)

Example 13 Possessive -s (early in B)

S13: The bike of Daisuke is nice.
→ (written recasts) Daisuke’s motor bike is nice?
→ (Student’s revision) Daisuke’s motor bike is nice. (successful)

In Examples 1, 4, 5, 6, 8, 9, 10, 12, and 13, students successfully repaired their errors referring to written recasts. However, in Examples 2, 3, 7, and 11, they failed in revising errors. The former was regarded as repair (successful) and the latter as needs repair (failed). Some may argue that this measurement may not be valid: Long (2007) mentions that recasts do not always have immediate corrective effects and that learners’ repair is unreliable as an indication of learning since it might be just a “language-like” behavior (p.99). However, as at least written recasts led students to correct their errors producing grammatical forms, it was decided to take this measurement in the current study (e.g., Lyster, 1998b; Lyster & Ranta, 1997; Sato, 2006, 2009a).

One rater conducted categorization of written recasts. A week after the first categorization,
the same rater conducted it again. This method of classification follows Alderson et al. (1995), which explains that multiple rating sessions increases the reliability of the rating. Where there were discrepancies between the two ratings, a second rater was invited to rate them. After discussion the disagreement was solved.

6.3.3 Results

In total, 125 written recasts were recorded. Grammatical recasts were made 81 times: lexical recasts, 17 times; recast to unsolicited use of the Japanese language, 11 times; recasts to spelling error 6 times; recasts to content, 10 times. Among 81 grammatical recasts, 44 recasts belonged to Categorization A, and 22 were categorized as early development or easy structures and 22 were as late development or difficult structures. Among 81 grammatical recasts, 56 belonged to Categorization B, and 26 were categorized as early development or easy structures and 30 were as late development or difficult structures. In measuring the effectiveness of written recasts determined by grammatical difficulty, proportion of their repair (success rate) was calculated. In a situation where students did not use or avoided using the same structure in their revision, it was excluded in the analysis.

Table 6.12 shows the number of recasts, repair, needs repair, avoided move and success rate for early developmental or easy structures in Categorization A. Table 6.13 shows the same for late development or difficult structures in the categorization. Table 6.14 shows the number of recasts, repairs, needs repair, avoided move and success rate for early developmental or easy structures in Categorization B. Table 6.15 shows the same for late development or difficult structures in the categorization.
Table 6.12: Categorization A (early development or easy structures)

The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite article (the)</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Irregular past tense</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Plural S</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>12</strong></td>
<td><strong>7</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

*Success rate = 63%*

Table 6.13: Categorization A (late development or difficult structures)

The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite article(a,an)</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Relative clauses</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Active &amp; passive voice</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Third person singular S</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>13</strong></td>
<td><strong>6</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

*Success rate = 68%*
Table 6.14: Categorization B (early development or easy structures)

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive(-ing)</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plural S</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Be copula</td>
<td>13</td>
<td>7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Be auxiliary</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possessive -s</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26</td>
<td>15</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

*Success rate = 60%*

Table 6.15: Categorization B (late development or difficult structures)

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irregular past tense</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Third person singular S</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Article (a, the)</td>
<td>11</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>17</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

*Success rate = 68%*

In Categorization A, success rate of recasts to easy structures (63%) was lower than that of difficult ones (68%). In Categorization B, which has taken some account of Japanese learners’ developmental progression, success rate was higher in more difficult structures (68%) than in easy ones (60%).
6.3.4 Discussion and Conclusion

It was found that students were more likely to show repair to written recasts than not. Success rates (the lowest, 60% and the highest, 68%) are higher than those of oral recasts examined previously (e.g., Lyster & Ranta, 1997). It is assumed that written recasts are more effective than oral recasts in leading learners to repair their erroneous production. Eleven students mentioned in the free comments that they found they had made mistakes or errors when they read written recasts and revised their work. Six students wrote in the comments that they found they had not yet learned the correct grammatical knowledge about the structures and that by reading the recasts they learned the grammatical rules correctly. From this, we could say that written recasts activated students’ previously existing learned systems and partially acquired knowledge whether it is about knowledge for easy structures or difficult structures. In addition, in some cases, written recasts provided students with opportunities to learn structures they had not yet learned. Four students wrote in their comments that by reading a recast they learned how to write what they had wanted to write but could not. In the situation, the students were able to fill the gap between what they wanted to write and what they actually wrote, after referring to the written recasts.

It was revealed that recasts to difficult structures showed higher success rates. This implies written recasts are effective both to easy and difficult structures. As to the possible reasons for this, it is interpreted that even written recasts to difficult structures can let learners repair their previous erroneous production regardless of their limitation of working memory and current level of grammatical knowledge. Unlike oral feedback, written feedback was not fleeting and thus enabled students to trace it back by reading (Payne & Whitney, 2002). This nature of written feedback was beneficial enough for students with shorter working memory and less grammatical knowledge. A student’s comment that she repeatedly read the written recasts to repair her errors confirms this interpretation.
Findings of this research offer an implication for writing teachers. As the results showed the effectiveness of written recasts regardless of the degree of difficulties of grammatical structures, it is assumed that teachers can utilize written feedback in the form of written recasts in teaching writing. It is true that it takes time and energy to give written feedback, but it is worthwhile in improving students’ writing skills.

6.4 Summary of Chapter 6

Study 7 demonstrated that accuracy and fluency in writing were not contradictory but compatible, suggesting students can improve both elements.

Study 8 found that by providing written feedback in the form of recasting, the quality of the writing from the points of accuracy, fluency and complexity would improve in the second draft, reducing trade-off-effect between accuracy and fluency. This study, in general, implied beneficial effects of written recasts for learners to notice their errors or mistakes leading them to repair.

Study 9 also confirmed beneficial effects of written recasts provided to grammatical errors irrespective of the degree of difficulty of grammatical features. However, a number of limitations should be noted for studies 8 and 9. The sample size was small with only 25 students who were in a national university. Ideally we should have more participants from different schools with different English proficiency levels. In providing written feedback, there was no control: Written recasts were provided randomly, mainly depending on the teacher’s intuition so that students could use them to improve the overall quality of the writing in the second draft. Some grammatical features or structures are more teachable or treatable than others (Xu, 2009). Depending on which structures are targeted, the success rate of repair can be different. In Study 9, as for the categorizations of grammatical structures as easy or difficult for Japanese learners, structures were divided into two groups with the first half of
four structures termed as easy and the second half of the four structures termed as difficult. However, as this categorization might be considered insufficient, we will need to establish more valid categorizations. Studies on written recasts reported in this chapter implied the effectiveness of written recasts. However, these studies should be seen as preliminary. To confirm the findings of the studies, further research which can overcome the given limitations is needed.
Chapter 7
Examing Self-initiated Modified Output Attempt by Japanese High School Students with low English Proficiency

Previous chapters (chapter 3, 4, 5, and 6) reported studies on recasts. In the next two chapters, studies on students’ self-initiated self-repair are reported. In chapter 7, the study (Sato, 2008b) with lower-level high school students is reported. In the study the term, “self-initiated modified output” was used for self-initiated self-repair.

7.1 Study 10: Examining Self-initiated Modified Output Attempt by Japanese High School Students with low English Proficiency

7.1.1 Purposes of the Study

In output-based activities without a teacher, students are required to perform communicative activities with other students and demonstrate “self-initiation,” which refers to the attempt to produce more accurate and more comprehensible output pushing learners to reprocess and restructure their inter-language toward modified output (Shehadeh, 2001). However, some may be skeptical as to whether Japanese high school learners, most of whom are not high in English proficiency, can self-initiate and self-repair their production in an output-based communicative activity. To identify the difficulties with self-initiated self-completed repairs, or self-initiated modified output, it is necessary to examine whether learners can self-initiate their utterances. This study (Sato, 2008b) focused on an English class consisting of students with low-level English proficiency as most of our students are not competent enough for real communication especially when they are required to converse with
others open-endedly and without structure.

The main purpose of this study is to inspect verbal reports during communicative activities to examine whether learners self-initiate their utterances while performing output-based communicative activities. The research questions posited for this study are:

RQ1. Does self-initiation frequently occur during the communicative activities selected for the study?
RQ2. If not, what are the factors that hinder self-initiation?

These research questions were motivated by the need to explore the effectiveness of output-based communicative activities on Japanese high school students. As is pointed out by Ellis (1997), most English classes are taken up with teaching grammar without communicative activities, and most teachers do not provide students with much opportunity for output through actual communication. To improve this situation, it is crucial to examine the effect of output-based communicative activities. Specifically focusing on self-initiated modified output, this study examines how effectively students correct their mistakes and errors or not, and explores possible factors which may constrain the occurrence of self-initiated modified output. This is a descriptive study focusing on how students successfully or unsuccessfully self-repair their utterances in three different communicative activities.

7.1.2 Method
Participants and procedures are the same as Study 1 in Chapter. The data obtained in Study 1 were used to be analyzed for the purpose of this study. However, in this chapter, more details are described.
7.1.2.1 Participants

The participants in this study were 38 second-year students (20 males and 18 females) at a public high school in Hokkaido who were college bound. Most of them were not highly motivated to learn English. Students were divided into two groups in such a way that there was no overall difference in English ability between the groups. This was done by using the test score in the most recent term test: Group A, \( n=18 \); Group B, \( n=20 \). In performing communicative activities, students should feel comfortable and relax with their partners to maximize their performance. Their English teacher, who was also a homeroom teacher and understood the personality of each student, put the students of each group into pairs with careful consideration of their character so that every student would feel comfortable with his/her partner: Group A consisted of 9 pairs and Group B 10. After they finished each activity, they found another partner and continued with the activities. Group A performed the activities on the first day of the class and Group B performed on the second day. This measure (separation of groups) was taken so that two teachers would be able to observe and record students’ utterances more effectively and in detail.

7.1.2.2 Procedure

Three activities, namely, play-acting, a skeleton dialogue and an interview, which are typical and traditional activities widely found in many textbooks authorized by the Japanese government, were developed for this study. In play-acting activities students are usually required to practice and learn the role by heart to perform the model dialogue. Students in this study were given the direction that if they had not been able to memorize all the words or had forgotten what they had memorized during the dialogue, they should use their own words or expressions which could serve to continue the conversation (see Appendix A). In the skeleton-dialogue activity, students were required to fill in the blanks of the model dialogue.
The students were given time to fill in the blanks by themselves and then they performed the dialogue. Livingstone (1983) explains, “skeleton dialogues give a very limited choice and can be used where the situation and function are concrete” (p.53). The following is an example from three skeleton dialogues he introduced.

A: Excuse me, when’s the next train to ____?
B: At ____________.
A: How much is a _______ ticket?
B: ______________.
A: And which platform does it leave from?
B: ______________.
A: Thank you. (p.53)

In this skeleton dialogue, students are simply required to put in information by using a railway timetable. They only have to deal with simple facts, not abstract or personal concepts. However, for the current study a traditional skeleton dialogue activity was developed in a way that would encourage students to give opinions and to express their ideas, and likes and dislikes thus promoting authentic communication and interaction. In addition, students were required to continue conversation freely about the topic (see Appendix B). In the interview activity, students were asked to take the role of an interviewer and to interview somebody. They were directed to ask other students what they would do if they had a lot of free time. Both interviewers and interviewees had to use the subjunctive mood. They were also required to obtain some information from interviewees and then to continue the conversation freely (see Appendix C). In the skeleton dialogue and the interview, the main focus was on free conversation. Three activities were from the textbook authorized by the Japanese government.
and these were then pilot-tested by three high school teachers with more than 15 years’ experience of teaching. By using their feedback some revisions and modifications were made so that students would have no difficulty with the activities. As students had opportunities for communication and interaction during the activities, we regarded them as output-based communicative activities. All of the students performed the activities in pairs at the same time. For logistic reasons we could not tape-record the dialogues of all the pairs, and only a few pairs were recorded and monitored by us for this study. Specifically, during the activities three volunteer students used a microphone to record their utterances and teacher A, with her own microphone, tape-recorded some pairs’ dialogues. Teacher B observed and transcribed some dialogues for further analysis. In total, 26 play-acting activities, 29 skeleton dialogues and 27 interviews were recorded. All recordings were transcribed and re-checked by the researchers (teacher A and teacher B) to ensure their accuracy and in a limited number of cases where there were still unsolved transcriptions difficulties the original participants were invited to interpret. In both of the groups, students first performed play-acting (25 min.), followed by the skeleton dialogue (15 min.) and then the interview (15 min).

7.1.3 Results and Discussion

7.1.3.1 Does Self-initiation Frequently Occur During the Communicative Activities Selected for the Study? (RQ1)

The results did not show much successful self-initiated modified output. The following is one of few successful examples from a play-acting activity.

1. Student A: Oh, you are very taller… tall, Yasu!
   
   B: Yes. Everybody says so.
   
   A: If I were you, I play… I would play basketball.
B: I don’t like it. Takeshi, you are good at English.
A: Thank you. I study English every day.
B: I would try to make American friends if I’m... if I were you.
A: I see, but our English teacher speaks English very well.

*Note*. Self-initiated modified output is written in italics.

However, in the following dialogue, student D noticed her mistake and corrected it, but student C did not notice her own mistake and continued the conversation.

2. Student C: Oh, you are very tall, Yuki!
   D: Yes. Everybody says so.
   C: If I were you, I play basketball.
   D: I don’t like it. Miki, you are good at English.
   C: Thank you. I study English every day.
   D: I would try to make American friends if I’m... I were you.
   C: I see, but our English teacher speaks English very well.

*Note*. Self-initiated modified output is written in italics. Erroneous utterance is underlined.

Among the tape-recorded dialogues there were conversations without any self-initiated modified output. In Example 3, both students made mistakes without self-initiated correction. However, they continued the dialogue and finished it.

3. Student E: Oh, you are very tall, Yosuke!
   F: Yes. Everybody say so.
   E: If I were you, I play basketball.
F: I don’t like it. Shin, you are good at English.
E: Thank you. I’m study English every day.
F: I …….. make American friends if I were you.
E: I see, but our English teacher speaks English very well.

*Note. Erroneous utterance was underlined*

In approximately half of the recorded dialogues, we found successful attempts at self-initiated correction in the case of play-acting activities. In the activity, students were required to memorize words and expressions as accurately as possible, which made it easier for self-initiations to happen within the same turn. In other words, as students were pushed to produce the exact words and expressions used in the model dialogue, it was not difficult for them to notice when they produced incorrect words and expressions and correct them.

However, in open tasks the situation was totally different. In the skeleton dialogue students were required to fill in the blanks with their own words, and in the interview they were required to have an interview with somebody. In both of the activities they were asked to have a free conversation. In the free conversations we rarely found successful attempts at self-initiated repair. The following are examples:

4. Student G: If you had a lot of money what would you buy in the country?
   
   H: I would (buy a many soccer goods).
   
   G: (Soccer?)
   
   H: (Yes. I play soccer junior high school.)
   
   G: (I play soccer yesterday. I’m soccer club.)

*Note. Given written text is written in print and their own utterances are placed within parentheses.*
5. Student I: What would you buy if you had a lot of money?

J: I (buy many CD).

I: (What are CD?)

J: (I don’t know. Because many… many, many).

I: ……..

J: (I hear music always).

*Note.* Given written text is written in print and their own utterances are placed within parentheses.

In the examples, students did not notice their erroneous utterances nor did they correct them. In Example 5, despite student I’s implication that he did not understand the previous expression, student J did not correct or modify the utterance. In the case of open tasks they had difficulty in noticing mistakes or errors they made because they had not had model expressions as they had in play-acting. Table 7.1 shows the number of conversations with successful and unsuccessful self-initiated modified output.
Table 7.1: The number of conversations with successful and unsuccessful self-initiation

<table>
<thead>
<tr>
<th>Activity</th>
<th>The number of pairs recorded</th>
<th>Conversations with successful self-initiated modified output by both students</th>
<th>Conversations with successful self-initiated modified output by one student</th>
<th>Conversations with unsuccessful self-initiated modified output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play-acting</td>
<td>26</td>
<td>10</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Skeleton dialogue</td>
<td>29</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Interview</td>
<td>27</td>
<td>3</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

7.1.3.2 What are the Factors That Hinder Self-initiation? (RQ2)

In the current study, self-initiation did not occur frequently. The main reason for this may have been students’ low English proficiency. Lyster and Ranta (1997) argue that self-initiated, self-completed repairs will not happen if learners do not have an adequate level of English proficiency. A reason for this has been offered by VanPatten (1990, 1996) who claims that for low-level learners it is enough just to maintain communication. For most of the students in the study, continuing the conversation could have been their first priority and it is arguable that it is premature for them to produce self-repairs. It stands to reason that without knowing or internalizing some grammatical structures or expressions, learners cannot notice their own mistakes and so cannot correct them.

A second factor that constrained self-initiation may have been the interlocutors’ feigned comprehension. In self-initiation, NNSs modify their output to produce more comprehensible output when they realize that their current or previous utterance is insufficient to communicate their intended meaning (Kasper, 1985). However, in support of Aston’s (1986)
remark that “interlocutors sometimes feign comprehension in order to keep the conversation going, reaffirm satisfactory communication, and maintain a satisfying rapport”(p.139), students in this study often pretended to have understood the previous utterance. In the following example, student K’s utterance “Who you buy?” was not understood by student L. However, she continued the conversation and K also kept the conversation going. The interview with L after the class revealed that she feigned comprehension to keep the conversation going.

6. Student K: If you had a lot of money, what would you buy in the country?

   L: I would buy many Omiyage.
   K: Who you buy?
   L: I buy foods and….foods.
   K: Please give me.

In example 7, both students must have had difficulties in understanding their partner’s utterances or could not understand them as they were intended, but they continued the conversation anyway.

7. Student M: What would you buy if you had a lot of money?

   N: I would buy many clothes.
   M: Do you go… where depart… or shop?
   N: …I like Seibu.
   M: Let’s go together.
   N: OK.
Another possible reason why they feigned comprehension might have been their motivation. As previously mentioned, the students were not highly motivated in learning English so they may have been more interested in completing the activities than in genuinely communicating in English. During my teaching career, I have seen a lot of students who did not want to talk in English and just wanted to finish the conversations, even if they have not understood the utterances. In the examples, they must have feigned to have understood the utterances in order to continue and finish the conversation. We could argue that feigned comprehension, as introduced in examples 6 and 7, hindered students from producing self-initiation attempts.

The situation in the current study where only novice learners conducted the dialogue may have constrained the frequency of self-initiation. In the following example, students produced self-initiated modified output only to end up making erroneous incorrect utterances.

8. Student O: What would you buy if you had …have a lot of money?
   
   P: I would…..I will buy a camera.
   
   O: Oh, good idea. Do you have a camera?
   
   P: No, I don’t. Do you have a … you have it?
   
   O: Yes, I do…no, no, I have.

Regarding the results across the three activities, Table 7.1 shows that play-acting led to more successful self-initiated modified output than the skeleton dialogue or the interview did. In the play-acting, which was a closed task, students made an effort to memorize lines, and in the dialogue they persisted in using the models. On the other hand, in the skeleton dialogue and the interview, they could continue talking freely without having to refer to models, which may have made it difficult for them to self-repair their errors and mistakes. Table 1 shows the number of students’ unsuccessful self-initiated utterances. In play-acting, students produced
more unsuccessful self-initiated modified output than in the skeleton dialogue and the interview. It could be argued that since students were given accurate models on which to base their interactions in play-acting, which was not the case with the other two activities, they were more likely to notice their errors and mistakes in this activity than in the skeleton dialogue or the interview, and therefore they tried to self-repair their incorrect utterances, sometimes unsuccessfully.

Aljaafreh and Lantolf (1994) claimed that tutors should continuously assess learners’ needs in order to provide appropriate help, and went on to make the claim that, “this process can be accomplished only through the collaborative interaction of the expert and the novice” (1994, p.468). Students left on their own to solve their immediate production problems or difficulties were required to engage in various thought processes that consolidate existing knowledge or possibly generate new knowledge on the basis of their current knowledge (Kormos, 2000). This must have been too difficult for the students in this study, with very limited linguistic knowledge of English, which sometimes made them produce erroneous utterances through insufficient self-initiated repairs.

### 7.1.4 Pedagogical Implications

Qualitative analyses offer some pedagogical implications. It is unlikely that low-level students, such as those in the study, would notice their own mistakes or errors and their failed attempts to convey messages. Thus it is arguable that low-level students are unable to engage in self-initiated correction and modification. Allowing such students to converse freely may not necessarily lead to acquisition. One could argue that communicative activities should only be used if teachers can intervene frequently (e.g., in situations where class sizes are smaller or there are more teachers in the classroom so that students and teachers can have more interaction). However, we should be careful in emphatically excluding the use of
communicative activities in the form of pair work or group work even in a large size class. Rather, we should justify the use of those activities in enhancing students’ communicative abilities for the requirement of being “Japanese with English Abilities”, because it is self-evident that students can use English for real communication during the activities. In the study, students were using English, even with some errors and mistakes, for real communication. It remains valuable to provide students with many opportunities for output through real communication even with mistakes and errors. We should take into consideration a number of previous studies which documented the significant advantages of communicative activities and then utilize them. With a little thought we could make pair work and group work more effective. One possible measure which could be used to cope with the issue of large class sizes is “peer-supervision” or “peer-intervention.” While students are engaged in an interaction with their partners it is not easy to attend both to meaning and form at the same time, making it difficult for them to notice their errors and mistakes. As VanPatten (1990) has suggested, because of their cognitive constraints, learners have difficulty in achieving a high level of linguistic accuracy just through communicative activities.

Proficient students, who are appointed by the teacher as peer-supervisors, could, while observing other students’ dialogues, implicitly or explicitly let speakers notice erroneous utterances they have made so as to lead them to self-repair. This would be beneficial for student-supervisors as well since they would have to attend to interactions with full concentration, exercising their metalinguistic knowledge of English. It would, of course, be crucial for peer-supervisors to be briefed by the teacher that they should observe in an unobtrusive manner otherwise performers might be discouraged from speaking. Some may claim that this would be impractical considering students’ limited metalinguistic knowledge, but we argue that the approach could be facilitated by teachers giving prior instruction on linguistic points to peer-supervisors. Peer-supervisors are not necessarily highly proficient
students. Students could be given the role in rotation, which would make the activities much more student-centered, motivating them to participate in output-based communicative activities with more enthusiasm.

Another suggestion to make the activities more effective is that teachers should, after the first activity, give students negative feedback, grammar points, key expressions and words so that they can self-initiate their re-production more easily, and then students should be asked to perform again. To provide students with explicit instruction including controlled production drills that focus on accuracy can be beneficial for successful self-initiation to occur when students perform communicative activities again. Additionally, after the activity, teachers could ask students to write sentences they wanted to produce, but actually could not, by using dictionaries or grammar books. In some cases a teacher may have to explain grammatical rules students have not yet fully understood. In the post-activity of completing their target expressions or sentences, students can learn new words, expressions and even grammatical rules. As for which types of activities should be employed for self-initiation to occur, this study revealed that closed tasks are more likely to be beneficial for the purpose. However, as Sato’s experimental study (2005) revealed, a closed task has a more facilitating role in acquiring a target grammatical structure than open tasks and that open tasks are more beneficial to encourage learners to be more communicative. We should decide which type of task should be used according to the purpose of the classes.

There are two limitations to our analysis and discussion. The first limitation is the fact that not all utterances in the activities were recorded for further analysis. Ideally we should have tape-recorded all interactions. The second limitation concerns the English proficiency of the students. Most of the students in this study were not proficient. More proficient students may have shown different results and provided a more secure basis for inference on the basis of proficiency. It is suggested that research be conducted to compare self-initiated modified
output across different proficiency levels.

7.2 Summary of Chapter 7

In this chapter, the study examined whether self-initiation would occur effectively in three communicative activities involving only students. The results of this descriptive study revealed that successful self-initiated modified output did not occur frequently as previous studies had shown (e.g., Schegloff et al, 1977; Schegoloff, 1979; Shehadeh, 2001). This doesn’t mean, however, that output-based communicative activities are not effective for language acquisition. In the activities, students showed signs of struggling to make meaning, which, we argue, is itself a learning endeavor and most important for learning. The students, who were still at the beginner stage, were actually communicating by making use of their limited knowledge of English, though not always with correct form. It may be true that low-level students are not able to self-repair as they have not yet acquired enough skill to do so, but they did make a significant effort to exchange information and ideas through communication. The act of producing language consists part of the process of language learning, even taking into consideration some mistakes and errors. Making mistakes and errors itself is an important process for language acquisition. As Brown (1994) mentions, we should “regard learners’ errors as important windows to their underlying system…” (p. 27) and “errors are a necessary manifestation of interlanguage development…” (p. 177). We remain convinced that many more opportunities for communication in English should be provided even to low-level learners to improve their English learning despite the cautionary implications of limited self-initiated repair in the case of students with low proficiency that was the central finding of this study reported in Chapter 7.
Chapter 8
Examining Self-initiated Self-repair Attempts by Japanese High School Learners with Intermediate English Proficiency While Speaking English

In the last chapter, the study with low English level students revealed that successful self-initiated self-repair did not occur frequently. In this chapter, two studies, Study 11 (Sato, 2012a) and Study 12 (Sato & Takatsuka, 2012), which investigated self-initiated self-repair attempts and their effects on Japanese high school learners with intermediate English proficiency, are reported.

8.1 Study 11: Self-initiated Self-repair Attempts by Japanese High School Learners While Speaking English

8.1.1 Purposes of the Study

In the last chapter, Study 10 (Sato, 2008) examined self-initiated self-repair on low-level Japanese learners of English without high motivation toward learning English. It was revealed that while the students were performing communicative tasks with a partner (another student), self-initiated self-repair frequently did not occur successfully. As previous research indicates that self-initiated self-repair can be utilized more effectively by high and intermediate learners than by low-level learners, it is necessary to investigate the act of self-repair not only by low-level Japanese learners but also by intermediate Japanese ones.

The present study (Sato, 2012a) examined self-initiated self-repair by low-intermediate high school learners, most of whom are college bound. Learners are engaged in an interaction not with another student with a native speaker of English. Well-formed repair after
self-initiation was counted as successful. Types of triggers were classified as: errors; different information; appropriacy. Errors were subcategorized into four groups: grammatical; lexical; phonological; the first language use. These definitions will be explained in more detail later. The following research questions (RQs) were formulated.

RQ1. Is the success rate of self-initiated self-repair high?
RQ2. Is there any difference in the occurrence of self-initiated self-repair according to the types of triggers?
RQ3. Is there any difference in the success rate according to the types of triggers?
RQ4. Is there any difference in the occurrence and success rate among the different types of error repair?

8.1.2 Method

8.1.2.1 Participants and Procedure

Participants and procedures are the same as ones in Studies 2, 3, and 4: Data obtained in the studies were used for the purposes of this study.

8.1.2.2 Data Collection and Analysis

In the present study, self-repair attempts issuing from self-initiation after a trigger is termed as self-initiated self-repair. The following is an example of a self-initiated self-repair from the present study.

Example 1

David: When did you start playing the piano?
Student 1: My twelve, in twelfth grade.
Student 1 detected her error (trigger) and successfully repaired it by herself.

As for classification of self-repairs, mainly referring to Levelt (1983) and Kormos (2000), self-initiated self-repairs were classified into three groups for the present study: different information, appropriacy, and error. A different information repair is defined as speakers’ encoding of different information from a previous formulation. An appropriacy repair is defined as speakers’ encoding of information that needed to be “more precise, more coherent, pragmatically more appropriate, or less ambiguous” (Kormos, 2000, p. 150). An error repair refers to the act of speakers’ attempts to repair their previous erroneous utterances. As the fourth type of repair, a rephrasing repair was given in Kormos (2000), and defined as a repetition of a slightly modified version of a previous utterance resulting from uncertainty about its correctness. However, it was assumed that it would be difficult to draw a clear line between a rephrasing repair and an error repair (or appropriacy repair), without a retrospective interview with speakers for confirmation. Thus, it was decided not to include the category of a rephrasing repair in the present study. The following are examples of a different information repair and an appropriacy repair from the study.

Example 2 Different information repair
S2: I, my family had a dog. (Successful)

Example 3 Appropriacy repair
D: Are you in any clubs?
S3: Yes. I belong to the club, the soccer club and… (Successful)

Student 2 uttered “I” but decided to encode different information by repairing it to “my family”. In Example 3, student 3 decided to make his previous utterance more precise and
pragmatically more appropriate and it was successfully conveyed.

Error repairs were subcategorized into four groups according to the type of triggers: grammatical, lexical, phonological, and the first language, Japanese, (L1) use. This grouping was based on Lyster and Ranta (1997): (1) Grammatical errors are errors in the use or lack of determiners, particles, verb forms, word order; (2) Lexical errors include inappropriate, imprecise or inaccurate choices of lexical items; (3) Phonological errors address inappropriate, imprecise or inaccurate pronunciation; (4) Unsolicited use of Japanese is an instance where a student speaks Japanese instead of English. The following are some examples.

Example 4 Grammatical
D: What junior high school did you go to?
S4: I was gone to, I went to Matoba Junior high school. (Successful )

Example 5 Grammatical
D: Why do you want to be a nurse?
S5: I’m take, I like take care of people. (Failed)

Example 6 Lexical
S6: Last night I see, I saw a dream. (Failed)
D: Oh, you had a dream last night.

Example 7 Phonological
D: What was the last thing that you bought?
S7: Hmm… I bought a bak, bag. (Successful)
Example 8 L1 use

D: After school when you are at home, what do you do?

S8: I _neru_ (sleep in Japanese), sleep at home. (Successful)

In Example 4, the student successfully self-repaired the grammatical error, while student 5 failed to repair her error in expressing her desire or will. In repairing her error, student 6 made a wrong word choice. In Example 7, mispronunciation of bag resulting from Japanese pronunciation was successfully repaired. On many occasions, students first used L1 and then changed it into English. In the activity, they were required to speak only in English, and as it is crucial for them to communicate without using Japanese, L1 use was coded as an error in the study.

Classification and sub-categorization of self-initiated repairs was conducted by the researcher. A week after the first classification, it was conducted again by the same researcher. This method of classification follows Alderson, Clapham and Wall (1995), who wrote that multiple rating sessions increase the reliability of the rating. Where there were discrepancies between the two ratings (3 cases), a second rater, a high school English teacher with more than 15 years of teaching experience, was invited to rate them after discussion, disagreement was resolved.

8.1.3 Results

8.1.3.1 Is the Success Rate of Self-initiated Self-repair High? (RQ1)

The first research question asked about the success rate. Eighty-six self-initiated self-repair attempts were conducted successfully and 25 failed. To examine whether there was a statistical difference between the number of successful self-initiated self-repairs (86) and failed ones (25), a chi-square statistic was calculated, finding a statistically significant
difference between them ($\chi^2 = 33.52$, df = 1, $p = .00$).

Table 8.1: Success rate of self-initiated self repair attempt

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Success</th>
<th>Failed</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-repair attempt</td>
<td>111</td>
<td>86</td>
<td>25</td>
<td>77%</td>
</tr>
</tbody>
</table>

8.1.3.2 Is There any Difference in the Occurrence of Self-initiated Self-repair According to the Types of Triggers? (RQ2)

The second research question asked about the occurrence of self-initiated self-repair according to the types of triggers. In total, 111 self-initiated self-repairs were reported. Among them, error repairs occurred 86 times (78%); different information repairs occurred 9 times (8%); and appropriacy repairs occurred 16 times (14%). A chi-square statistic test revealed there was a statistically significant difference in the occurrence by the types ($\chi^2 = 98.0$, df = 2, $p < .05$). It also revealed that the difference in the occurrence of error repairs (86) and that of different information repairs plus appropriacy repairs ($16 + 9$) was statistically significant ($\chi^2 = 98.0$, df = 1, $p = .00$). There was no statistically significant difference between different information repairs and appropriacy repairs.
8.1.3.3 Is There any Difference in the Success Rate According to the Types of Triggers? (RQ3)

The third research question concerned the success rates according to the types of triggers. It was reported that error repairs had a 77% success rate, different information repairs had 89% and appropriacy repairs was 75% successful. A chi-square statistic test with Yates’ continuity correction revealed that there was not a statistically significant difference in the success rates according to the types.

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Success</th>
<th>Failed</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Repair</td>
<td>86</td>
<td>66</td>
<td>20</td>
<td>77%</td>
</tr>
<tr>
<td>Appropriacy repair</td>
<td>16</td>
<td>12</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>Different Information repair</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>89%</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
<td>86</td>
<td>25</td>
<td>77%</td>
</tr>
</tbody>
</table>
8.1.3.4 Is There any Difference in the Occurrence and Success Rate Among the Different Types of Error Repair? (RQ4)

The fourth research question concerned the occurrence and success rate of error repair according to the types. The category of error repair was further sub-classified. The success rate of each was: L1 use repairs had an 83% success rate, grammatical repairs 79%, phonological repairs with 75%, and lexical repairs had a 50%, success rate. To examine whether there was a statistically significant difference in the success rates by the four types, a chi-square statistic test with Yates’ continuity correction was conducted and we found that there was no difference.

Table 8.4: The occurrence and success rate of error repair according to the types

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Success</th>
<th>Failed</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 use</td>
<td>36</td>
<td>30</td>
<td>6</td>
<td>83%</td>
</tr>
<tr>
<td>Grammatical</td>
<td>34</td>
<td>26</td>
<td>8</td>
<td>79%</td>
</tr>
<tr>
<td>Phonological</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>75%</td>
</tr>
<tr>
<td>Lexical</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>66</td>
<td>20</td>
<td>77%</td>
</tr>
</tbody>
</table>

Table 8.5 summarizes the results (RQ2, 3 and 4).
### Table 8.5: The occurrence and success rates

<table>
<thead>
<tr>
<th>Types</th>
<th>Frequency</th>
<th>Success</th>
<th>Failed</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phonological</td>
<td>Total 8</td>
<td>6</td>
<td>2</td>
<td>75%</td>
</tr>
<tr>
<td>Error repair</td>
<td>Lexical</td>
<td>8</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Grammatical</td>
<td>34</td>
<td>26</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td>L1 use</td>
<td>36</td>
<td>30</td>
<td>83%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>86(78%)</td>
<td>66</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td><strong>Success</strong></td>
<td>86</td>
<td>66</td>
<td><strong>77%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Failed</strong></td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>111</td>
<td>86</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td><strong>Success</strong></td>
<td>86</td>
<td>66</td>
<td><strong>77%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Failed</strong></td>
<td>25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 8.1.4 Discussion

#### 8.1.4.1 Success Rate of Self-initiated Self-repair

Results of this study implied that learners are more likely to be successful in self-initiated self-repairs than to fail at them: a greater number of well-formed L2 self-repairs were recorded as compared to ill-formed ones. This result is compatible with earlier study findings (Kasper, 1985; Schegloff et al., 1977; Shehadeh, 2001; Van Hest, 1996). At the moment of detecting errors and mistakes, or triggers, in their original utterances, students noticed a gap between utterances and the target language. This led them to produce a modified output (Swain & Lapkin, 1995). It was recorded that David provided students with adequate time for them to produce an output. This presented them with sufficient time to attend to form while planning speech acts, and the opportunity to self-repair their erroneous original utterances. This situation created favorable conditions for self-initiated self-repair as defined in previous studies (Shehadeh, 2001; Yuan & Ellis, 2003). It can be argued that in some cases learners
found that they had made a mistake in the sense that Ellis (1997) uses that word: an accidental slip of the tongue resulting from tiredness or some kind of pressure to communicate (Ellis, 1997).

Example 9
D: What did you do after school yesterday?
S9: I go, went to a convenience and buy, bought? bought a magazine.

Example 10
D: Why do you want to be a teacher?
S10: Because, because I like child, children very much.

In these examples, students made a mistake and corrected it immediately after detecting its deviance from the correct form. It is interpreted that it was not so difficult for students to correct mistakes by using explicit knowledge, which is knowledge about language with awareness and learners can verbalize it.

8.1.4.2 Occurrence of Self-initiated Self-repair According to the Types of Triggers

The occurrences of self-initiated self-repairs according to the types of triggers were reported as: Error 86 times (78%) > Appropriacy 16 times (14%) > Different information 9 times (8%). The majority of students’ repair was on errors. The results were incompatible with Van Hest (1996), which reported appropriacy repairs accounted for 39.7%, followed by error repairs (22.4%) and different information repairs (10.1%). In the study of NS/NS discourse (Schegloff et al., 1977) and NS/ advanced NNS discourse (Kasper, 1985), it has been reported that the vast majority of repairs consisted of content or pragmatic repairs rather than linguistic
ones. The results of the present study did not support these findings either.

Kormos (2006), after evaluating previous studies, concluded that as L2 proficiency increases, the nature of repair changes from simple error repairs to more complex discourse level repairs. As a rationale for this argument, Kormos (2006) explained that compared to less-proficient learners, advanced learners acquire greater declarative knowledge, which is factual knowledge that is expressed explicitly. Those advanced learners are able to automatize that knowledge to a greater extent, leading them to attend to their own utterances at the level of discourse and content. This may be because students in the present study did not have enough attention available for monitoring at the level of discourse or content.

Levelt (1983) supposed that the act of self-repair would be intended to prevent potential communication breakdown. However, in this study, even when communication breakdown did not seem to occur, students frequently self-initiated to repair their errors.

Example 11

S11: Last night I watch, watched the movie on TV.

In this example, student 11 did not have to repair “watch” just to avoid a communication breakdown as “last night” had made the context clear. The followings are examples in which students self-repaired their errors even when communication breakdown did not seem to occur.

Example 12

S12: I read many book, books this summer.

Example 13

S13: My father drink, drinks beer every night.
Example 14

S14: When I was a junior high school student, I play, played soccer after school.

Errors of the third person S, the plural S and regular past tense in a sentence with an adverbial phrase or clause would not usually cause communication breakdowns. However, students self-repaired errors of the third person-S 3 times, the plural S, 4 times and errors of regular past tense 6 times. Kormos (2006) goes on to state that the demand of accuracy in the situation influences speakers’ decisions on the implementation of the repair. She mentions that formally instructed foreign language speakers who are taught explicit grammar pay more attention to the linguistic form than the information or content.

As this was an interview test in which their English proficiency would be measured, it is likely that students put priority on linguistic form or accuracy. In the formally instructed, accuracy-oriented Japanese EFL environment which is language-centered rather than content-centered, students in general would assume that using accurate English has primacy, leading them to repair errors frequently.

To account for the relatively low frequency of different information repairs, we can point out our observation that students tended not to initiate repair even when the wrong message would be conveyed.

Example 15

S15: I didn’t study English at all in junior high school.
D: Oh, your junior high school didn’t have English class.
Example 16

S16: We Japanese usually eat sushi, tempura, and sukiyaki…

D: Oh, you are very rich.

In these examples, students sent simplified potentially inaccurate messages. Neustupny (1982) reported that in speaking English to native speakers, Japanese people tended to convey simplified exaggerated messages. They avoided using more difficult complicated language structures and did not revise their utterances due to their perceived insufficient English proficiency, even though they knew their messages were not correct. In some cases, students in the current study also must have realized the need for repair to convey what they really meant during or just after the production, but did not repair incorrect messages. This may be because students chose to leave incorrect messages untouched due to the difficulty of revising them to be correct in English, as reported earlier (Neustupny, 1982).

8.1.4.3 Success Rate According to the Types of Triggers

As for the success rates according to the types of triggers, different information repairs was the highest (89%) followed by error repairs (77%) and appropriacy repairs (75%). Success rates were relatively high and there was no statistically significant difference according to types.

In the different information repair, students decided to use information different from the original source; information in which they did not have to experience linguistic problems. In situations where linguistic problems were found to be beyond their English proficiency, it may be assumed that they did not even attempt to repair them. In the following example, student 17 easily succeeded in providing different information.
Example 17
D: Tell me about your father.
S17: My father plays, likes watching golf on TV.

This interpretation can be applied to appropriacy repair.

Example 18
D: Why do you want to go to Korea?
S18: I want to study, learn Korean.

It is interpreted that the student tried successfully to repair the previous word “study” to make it more precise and pragmatically appropriate as this act was not beyond her English proficiency. High success rate of error repair resulted from high success rates of L1, grammatical and phonological repair. This will be discussed in the next section. Only in one case out of nine was a failed different information repair was reported.

Example 19
D: Why do you study English hard?
S19: It is important for me, we, because English is international…

In the example, it can be assumed from the context that the student wanted to say learning English is important. In changing the meaning of “me” (English is important for her) to “us” (for other people, too), the student attempted to add information that English is an international language. This dual task possibly made the repair cognitively demanding, and led to an error. In the eight other cases, students successfully changed the information.
8.1.4.4 Occurrence and Success Rate of Error Repairs According to the Types

In the category of error repairs, 36 of 86 instances were L1 use (42%), 34 were grammatical (40%), and only 8 instances each (9%) were phonological and lexical. Success rates of each were: L1, 83%; grammatical, 79%; phonological, 75%; lexical, 50%. It was frequently recorded that students, at first, used Japanese, and then restated it into English.

Example 20

D: Are you fast in the half marathon?
S20: Amari hayakunai, I’m not so fast.

Example 21

D: Do you like to play the piano?
S21: Hai, Yes.

Example 22

D: What are your good points?
S22: Akarui~ka, cheerful.

As these instances show, students answered in Japanese followed by the English counterpart. In most of the cases, correct English was produced immediately after the use of the L1 (Japanese). From this observation, it is thought that even though students did not have linguistic problems, they still chose to use Japanese first and then restate the utterance in English. This category having the highest success rate (83%) suggests this interpretation is correct. The mechanism of this common behavior observed in the study should be further
examined.

As a reason for the high frequency rate of grammatical repairs, McDonough (2005) stated that as EFL students are learning the target language in formal educational settings with explicit grammar teaching, they find grammatical error particularly noticeable. In this study, by using their explicit knowledge, students monitored their utterances and self-repaired them when triggers were detected. In this situation, learners were able to repair an utterance only when they had explicit knowledge of the grammar rule of the trigger. If not, they were less likely to try to correct their own grammatical errors. This could have contributed to the relatively high success rate of grammatical repair (79%). One common phenomenon, which possibly contributed to the high frequency of use as well as the high success rate, is the students' use of the be-copula before the correct use of verbs.

Example 23

D: Do you belong to a club?
S23: Yes. I am, I belong to the cooking club.

Example 24

D: What did he do that was clever?
S24: He was, listened to ten people.

This phenomenon is interpreted as a transfer from their L1. In the Japanese language, *wa* assumes some of the functions of the be-copula and is used before verbs as well. Due to such transfer, students often put be-copula first and then immediately after the detection of the error they repaired to the appropriate verb. This phenomenon was reported often, with nine occurrences in the study.
The reported frequency rates of phonological and lexical repairs were both low (9%). It is generally accepted that Japanese learners often cannot pronounce English correctly especially when they pronounce certain phonemes which do not exist in the Japanese language (MacKain, Best & Strange, 1981). Additionally, students are not well trained to listen to or pronounce subtle variations in phonemes. Nakamori (2009) pointed out that once Japanese learners of English acquire the manner of perceiving and expressing English sounds based on Japanese sounds (phonemes, syllables, intonations) it is extremely difficult to overcome the problem. In this study, students possibly could not detect their mispronunciations and if so, they could not try to correct them, leading to a low frequency rate.

As for the low frequency (9%) and success rates (50%) of lexical repairs, it was perhaps difficult for students to attend both to grammaticality and appropriacy of word choice.

Example 25 Lexical

S25: This morning I drink, drank medicine. (Failed)

D: Oh, you took medicine.

In the example, the student succeeded only in grammatical correctness but not in an appropriate choice of a lexical item. The sentence is grammatically correct, but as it is lexically incorrect it was counted as failed. Widdowson (1989) found that when learners are learning grammar through a rule-based approach, they often produce output that is grammatically correct but linguistically incorrect. As EFL Japanese students are learning

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10 There was no statistically significant difference in the success rates according to error types. An adjusted residual of lexical errors computed through the residual analysis revealed ±1.9, which was not a statistically significant difference (±1.96), but this can be attributed to the low frequency of lexical repairs.
English in formal educational settings with explicit grammar teaching which emphasizes accuracy or rules, it is felt that they were not instructed with attention to appropriate word choice but instead to grammatical correctness.

8.1.5 Conclusion

This study has shown the relatively high success rate of self-initiated self-repair (77%): It has also shown that the occurrence and success rates of self-initiated self-repair vary according to the types of triggers. Analyses of the findings and observation offer several pedagogical implications.

Teachers can be encouraged to give learners an explicit direction that they should try to repair their utterances when they detect their own errors or mistakes. It was thought, from the observation, that learners would not often repair their messages, even when the message was not what they meant to say. Teachers may have to encourage learners to repair their wrong message, as the move to produce a correct message would develop students’ interlanguage.

As it was observed that learners are less likely to self-initiate to self-repair their phonological and lexical errors, teachers, while interacting with a learner, should give students some feedback. By giving them prompts such as a clarification request and repetition of the error, teachers can push learners to modify their non-target output. They can also provide learners with models through recasts, confirmation checks or explicit correction, when learners cannot detect their non-target output.

A shared common behavior of L1 use followed by a restatement in English should be considered as a negative move by the learner. Unnecessary L1 use hinders target language development, causing possible communication breakdown with non-Japanese speakers. In this study, the results implied that students attend to linguistic errors more than to discourse or content level in monitoring. Keeping this tendency in mind, teachers can encourage students
to monitor their utterances, attending to not only the linguistic aspect but also to discourse- or content-related aspects of speech.

This small-scale study examined self-initiated self-repair attempts, and reported their effect on Japanese learners. However, the results should be considered cautiously, as there are some limitations to its findings. In this study, interviews as stimulated recall measurements were not conducted. To confirm the interpretations of the observed phenomena, retrospective interviews should have systematically been done with all of the students and the interlocutor, David. In the activity, even though David and the students had spontaneous interactions, the setting was an interview test. The results could have been different, if it had not been an interview test. Since the findings are within the context of the learners and the NS investigated in this study, conclusions should be taken as tentative without generalizing the results to other contexts.

8.2 Study 12: The Occurrence and the Success Rate of Self-initiated Self-repair Depending on the Grammatical Difficulty of Triggers.

8.2.1 Purpose of the Study

Previous studies examined the occurrences and success rates of self-initiated self-repair (e.g., Sato, 2008; Shehadeh, 2001), and they were examined according to types of triggers as well (e.g., Kasper, 1985; Levelt, 1983; Sato, 2012a; Schegloff et al, 1977). However, to the best of my knowledge, effects of grammatical difficulty of triggers on the occurrences and the success rates of self-initiated self-repair have not been examined. The current study was aimed at examining whether the occurrence and the success rate of self-initiated self-repair are influenced by grammatical difficulty of triggers. The following two research questions were formulated.
1): Is the occurrence of self-initiated self-repair influenced by grammatical difficulty of triggers?

2): Is the success rate of self-initiated self-repair influenced by grammatical difficulty of triggers?

8.2.2 Method

8.2.2.1 Participants and Procedure

Participants and procedures are the same as ones in Study 11: Data obtained in Study 11 were used to be analyzed for the purposes of this study.

8.2.2.2 Analysis

Students’ self-initiated self-repair was categorized in terms of grammatical difficulty of triggers. In categorizing grammatical items as easy or difficult, categorizations A and B were used for the analysis, as is done in Study 3 (Chapter 4). Categorization A is:

Early developmental (easy):
1. Definite article (the) 2. Irregular past tense 3. Plural S

Late developmental (difficult):
1. Indefinite article (a, an) 2. Regular past tense 3. Relative clauses
4. Active & passive voice 5. Third person singular S

Categorization B is:
Early developmental (easy):

Late developmental (difficult):
2. Irregular past tense 2. Regular past tense 3. Third person singular S
4. Articles (a/the)

The following are examples of self-initiated self-repair categorized in terms of grammatical difficulty of triggers either early (easy) or late (difficult) developmental. Trigger is written in italics, and repair, including failed one, is underlined.

Example 1 Definite article, the (early in A, late in B)
S1: I like playing a piano, playing the piano. (successful)

Example 2 Irregular past tense (early in A, late in B)
S2: I eat many, eated many foods when I was a child. (failed)

Example 3 Plural S (early in A and B)
S3: When I was a high school student, I read many book, books. (successful)

Example 4 Indefinite article (a, an) (late in A and B)
S4: My friend had dog, had a dog in her home. (successful)

Example 5 Regular past tense (late in A and B)
S5: My father give, given me present. (failed)

Example 6 Third person singular S (late in A and B)
S6: Our coach teach us, teaches us tennis. (successful)

Example 7 Progressive (-ing)(early in B)
S7: I studied, was studying, when my friend telephoned me. (successful)
Example 8 Be copula (early in B)
S8: He and I am, was in the same team. (failed)

Example 9 Be auxiliary (early in B)
S9: I can…is, I can be a teacher. (successful)

In Examples 1, 3, 4, 6, 7, and 9 the students successfully initiated to repair their errors. However, in examples 2, 5 and 8 they failed to do so. The former was counted as successful and the latter as failed. One rater conducted categorization of self-initiated self-repair. A week after the first categorization, the same rater conducted it again. This method of classification follows Alderson et al. (1995), which explains that multiple rating sessions increase the reliability of the rating. Where there were discrepancies between the two ratings (3 cases were recorded), a second rater, a high school English teacher with more than 15 years of teaching experience, was invited to rate them. After discussion the disagreement was solved.

8.2.3 Results
8.2.3.1 Overall Results
In total, 111 self-initiated self-repair attempts occurred. Successful repair occurred 86 times and failed repair occurred 25 times. On average, one student attempted to self-repair 3.5 times, minimum 1 and maximum 8, and SD was 2.09. As for the success rate per person, average was 75.0%, minimum 0%, maximum 100%, and SD was 31.32.

Attempts to repair grammatical errors were made 34 times. Among them successful repair occurred 26 times and failed repair occurred 8 times. On average, one student attempted to repair his/her grammatical errors 1.1 times, minimum 0 and maximum 3, and SD was 1.16.
for the success rate, average was 76.5%, minimum 0%, maximum 100% and SD was 29.47. Individual differences were not quite large in frequencies but large in success rates.

8.2.3.2 Is the Occurrence of Self-initiated Self-repair Influenced by Grammatical Difficulty of Triggers? (RQ1)

The first research question addressed the occurrence of self-initiated self-repair in terms of grammatical difficulty of triggers. Twenty of them belonged to items in Categorization A (Early developmental: Definite article (the), Irregular past tense, Plural S. Late developmental: Indefinite article (a, an), Regular past tense, Relative clauses, Active & passive voice, Third person singular S), and 9 (45%) were categorized as early developmental or easy items and 11(55%) were as late developmental or difficult items. Twenty-seven of self-initiated self-repair belonged to items in Categorization B, (Early developmental: Progressive (-ing), Plural S, Be copula, Be auxiliary, Possessive S. Late developmental: Irregular past tense, Regular past tense, Third person singular S, Articles (a/the), and 11 (41%) were categorized as early developmental or easy items and 16 (58%) were as late developmental or difficult items. Table 8.6 summarizes the occurrence of self-initiated self-repair categorized by the grammatical difficulty of triggers.

Table 8.6: Occurrence of self-initiated self-repair categorized by the grammatical difficulty of triggers

<table>
<thead>
<tr>
<th></th>
<th>Early (easy)</th>
<th>Late (difficult)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorization A</td>
<td>9(45%)</td>
<td>11(55%)</td>
<td>20</td>
</tr>
<tr>
<td>Categorization B</td>
<td>11(41%)</td>
<td>16(58%)</td>
<td>27</td>
</tr>
<tr>
<td>A + B</td>
<td>20(43%)</td>
<td>27(57%)</td>
<td>47</td>
</tr>
</tbody>
</table>

To examine whether there was a statistical difference in the occurrence of self-initiated
self-repair attempts between early developmental and late developmental items, a chi-square statistic was calculated in Categorizations A, B, and A and B combined. The results showed there was no statistical difference in each of the three situations.

8.2.3.3 Is the Success Rate of Self-initiated Self-repair Influenced by Grammatical Difficulty of Triggers? (RQ2)

The second research question addressed the success rate of self-initiated self-repair in terms of grammatical difficulty of triggers. Table 8.7 shows the numbers of self-initiated self-repair attempts, successful moves, failed moves and success rate for early developmental or easy items in Categorization A. Table 8.8 shows the same for late developmental or difficult items in the categorization. Table 8.9 shows the numbers of self-initiated self-repair attempts, successful moves, failed moves and success rate for early developmental or easy items in Categorization B. Table 8.10 shows the same for late developmental or difficult structures in the categorization.

Table 8.7: The numbers of attempts, successful moves and failed moves of early developmental or easy items (Categorization A)

<table>
<thead>
<tr>
<th>Type</th>
<th>Attempts</th>
<th>Successful</th>
<th>Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite article (the)</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Irregular past tense</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Plural S</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

*Success rate=78%*
Table 8.8: The numbers of attempts, successful moves and failed moves of late developmental or difficult items (Categorization A)

<table>
<thead>
<tr>
<th>Type</th>
<th>Attempts</th>
<th>Successful</th>
<th>Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite article (a, an)</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Third person singular S</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>9</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

*Success rate = 82%*

Table 8.9: The numbers of attempts, successful moves and failed moves of early developmental or easy items (Categorization B)

<table>
<thead>
<tr>
<th>Type</th>
<th>Attempts</th>
<th>Successful</th>
<th>Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive (-ing)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Plural S</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Be copula</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Be auxiliary</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>9</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

*Success rate = 82%*
Table 8.10: The numbers of attempts, successful moves and failed moves of late developmental or
difficult items (Categorization B)

<table>
<thead>
<tr>
<th>Type</th>
<th>Attempts</th>
<th>Successful</th>
<th>Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irregular past tense</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Third person singular S</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Article (a, the)</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>14</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Success rate = 88%

In Categorization A, success rate of self-initiated self-repair of easy items (78%) was lower than that of difficult ones (82%). In Categorization B, which has taken some account of Japanese learners’ developmental progression, success rate of difficult items was higher (88%) than that of easy ones (82%). To examine whether there was a statistical difference in the success rate between easy items and difficult items, a chi-square statistic test with Yates’ continuity correction was calculated because there were figures smaller than five in cells. This measurement was conducted in both Categorizations A and B, and it was found that there was not a statistical difference in each situation.

Grammatical errors that were not self-repaired were also counted. Table 8.11 summarizes the results.
Table 8.11 The numbers of grammatical errors that were not self-repaired.

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite article, (the)</td>
<td>6</td>
<td>early in A, late in B</td>
</tr>
<tr>
<td>Irregular past tense</td>
<td>10</td>
<td>early in A, late in B</td>
</tr>
<tr>
<td>Plural S</td>
<td>22</td>
<td>early in A and B</td>
</tr>
<tr>
<td>Indefinite article (a, an)</td>
<td>27</td>
<td>late in A and B</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>4</td>
<td>late in A and B</td>
</tr>
<tr>
<td>Third person singular S</td>
<td>27</td>
<td>late in A and B</td>
</tr>
<tr>
<td>Progressive (-ing)</td>
<td>4</td>
<td>early in B</td>
</tr>
<tr>
<td>Be copula</td>
<td>24</td>
<td>early in B</td>
</tr>
<tr>
<td>Be auxiliary</td>
<td>4</td>
<td>early in B</td>
</tr>
</tbody>
</table>

Indefinite article (a, an) and Third person singular S are the most ignored or unnoticed errors (27 times), followed by Be copula (24 times) and Plural S (22 times).

8.2.4 Discussion and Conclusion

It was revealed that students attempted to repair their errors that were categorized as difficult (55% in Categorization A, 58% in Categorization B) more frequently than ones categorized as easy (45% in Categorization A, 41% in Categorization B). However, there was not a statistical difference, meaning that students are likely to successfully repair grammatically difficult items as frequently as easy ones. It was also revealed that success rates of difficult items were higher (82% in Categorization A, 88% in Categorization B) than those of easy items (78% in Categorization A, 82% in Categorization B). However, as there was not a statistical difference, they are likely to succeed in repairing grammatically difficult items as well as easy ones.
In interpreting the high success rates of self-initiated self-repair in grammatical errors regardless of grammatical difficulty of triggers, we can refer to Kormos (2006), who claimed that formally instructed foreign language speakers who are taught grammar explicitly pay full attention to the linguistic form. Japanese EFL high school learners, such as the students in the study, are learning English in the accuracy-oriented learning environment in which grammar is taught explicitly in general. It can be assumed that the students in the study, who had explicit knowledge of even difficult items, monitored their output by using explicit knowledge and corrected their ungrammatical utterances successfully. At the moment of detecting errors or mistakes in their original utterances, students noticed a gap between the utterances and the target language. This led them to produce a modified output (Swain & Lapkin, 1995). It is important to note that David provided students with adequate time for them to produce an output. This presented them with sufficient time and the opportunity to self-repair their erroneous original utterances. This situation created favorable conditions for self-initiated self-repair as defined in previous studies (Shehadeh, 2001; Yuan & Ellis, 2003).

We have to look at, however, the fact that a lot of errors were not self-repaired. The most ignored or unnoticed items are Indefinite article (a, an) and Third person singular S, both of which were categorized as late developmental or difficult items, followed by Be copula and Plural S, which were categorized as early developmental or easy item. Although both types of items (easy or difficult) were frequently unnoticed, it can be argued that difficult items were less likely to be attempted to be repaired. Further study is definitely needed with retrospective interviews with all of the students to examine why they tried or not tried to repair. This would reveal more detailed mechanism of self-initiated self-repair.

As opposed to merely noticing an L2 example provided by feedback such as recasts, self-initiated self-repair involves a higher level of cognitive activity, accompanied by noticing the gap (Egi, 2010). Lantolf and Pavlenko (1995) states that self-repair is a desirable
condition for fostering learning, by asserting that language learning depends not so much on input as on the choices individual learners make. Because of its high occurrence, prevalence and constancy, it also should be regarded as a normal learning strategy (Shehadeh, 2001). As the present study showed a high success rate of self-initiated self-repair regardless of grammatical difficulty of triggers, it can be suggested that self-initiated self-repair should therefore be utilized more in Japanese high school classrooms so that learners can enhance accuracy of their output performance.

This small-scale study examined whether the effects of self-initiated self-repair are influenced by grammatical difficulty of triggers, and reported the findings. However, this study does have a crucial limitation. As Varnosfadrani and Basturkmen (2009) acknowledged, it was difficult to categorize grammatical items as early developmental (easy) or late developmental (difficult). In the current study, categorization employed in Varnosfadrani and Basturkmen (2009) was adopted as Categorization A. However, this categorization, which treated Indefinite article (a, an), Regular past tense, Relative clauses, Active & passive voice and Third person singular S as all equally difficult, may lack its validity. As for Categorization B, which was based on Krashen (1982) and was adapted referring to Shirahata (1988), it has some problems, for example, definite article and indefinite article were counted together; other previous studies revealed Plural S is acquired later by Japanese learners. In this study, items were divided into two groups with the first half of four items regarded as easy and the second half of the four items regarded as difficult. However, this categorization can be problematic. In addition, as two different categorizations were operationalized, in counting total number of occurrence of self-initiated self-repair categorized by the grammatical difficulty of triggers (Table 8.10), some items, such as Regular past tense and Third person singular, were counted twice. In the future study, more valid categorization should be carried out after overcoming these issues.
8.3 Summary of Chapter 8

Study 11 showed the relatively high success rate of self-initiated self-repair, revealing that the occurrence and success rates of self-initiated self-repair vary according to the types of triggers. These findings offered several pedagogical implications. Study 12 also showed the high success rate of self-initiated self-repair regardless of grammatical difficulty of triggers, which implies the importance of creating situations where students can self-initiate to repair their own errors and mistakes.

Self-initiated self-repair involves a higher level of cognitive activity, positively accompanied by noticing the gap, as opposed to merely noticing an L2 example provided by feedback such as recasts (Egi, 2010). Shehadeh (2001) has stated that self-initiated self-repair is a normal learning/teaching strategy because of its high occurrence, prevalence and constancy. This study reported a relatively high success rate of self-initiated self-repair, supporting the argument that self-initiated self-repair is an effective learning/teaching strategy. It should therefore be utilized more in Japanese high school classrooms.

However, because of limitations of the studies, a focused empirical study in different settings with introspective data is required so that we can validate the findings and interpretations of the observed phenomena in the studies. If further studies support the findings and interpretations of the phenomena found in the two studies, the importance of self-initiated self-repair for Japanese students’ learning English should be more widely acknowledged.
Chapter 9
Conclusion

This chapter presents a comprehensive summary of the findings of the present thesis. The summary focuses on the effects of recasts on Japanese EFL learners’ learning English as well as the phenomena and the effects of self-initiated self-repair on their learning. It also discusses the importance of recasts and self-initiated self-repair and the relation between them, followed by pedagogical implications, limitations of the studies and suggestions for the future research.

9.1 Summary of Findings

9.1.1 Effects of Recasts on Japanese Learners

In general, it was found that recasts provided to Japanese high school learners and university students are effective in the process of their learning, though the effects can vary according to some variables, such as recasts features and learners’ proficiency levels.

9.1.1.1 Recasts Given to Lower-Level Japanese High School Learners

Study 1 investigated the effectiveness of recasts on low-level Japanese EFL learners and the findings implied that recast are less likely to be noticed by them. However, as the study found that the teacher provided recasts inappropriately (e.g., without corrective purpose, without considering learners’ low proficiency), the study still implied that recasts could be effective with a little thought by the teacher, such as making recasts shorter without multiple changes, making them salient by changing the tone of voice, using facial expressions, or
adding a pause, and son.

### 9.1.1.2 Recasts Given to Low Intermediate-Level Japanese High School Learners

The results of the studies which explored into the effects into low-intermediate students (Studies, 2, 3, 4) have shown that recasts with short with only a single change recasts are more likely to be noticed by learners irrespective of the degree of difficulty of grammatical features. Qualitative analysis of students’ comments revealed that recasts are encouraging and motivating for learners due to their unobstructive nature. We can safely conclude that recasts can be utilized with Japanese senior high school English class, at least, with intermediate level students.

### 9.1.1.3 Noticing

How we can measure the effectiveness of recasts has been an issue. Study 5 has attempted to make clear this issue by examining university students’ noticing through stimulated recall interview. The results of the analysis have shown that learners’ correct reformulations of previous erroneous utterances after recasts are indicators of noticing, while mere acknowledgement is not, which implies that counting repair is a valid measurement for the effectiveness of recasts. The findings obtained through stimulated recall interviews with intermediate level university students in Study 6, revealed that the degree of change and length of recasts did not affect learners’ noticing. However, it was found that the effects of recasts on learners’ noticing can be different according to error types (i.e., grammatical, lexical or phonological).

### 9.1.1.4 Written Recasts

Investigation into the effects of written recasts on university students’ writing (Studies 8
and 9) showed relative effectiveness of written recasts. Study 8 found that written recasts can contribute to the development of accuracy and fluency in their writing from the first draft to the second draft reducing trade-off effect between them. Study 9 implied that written recasts provided to grammatical errors are effective irrespective of the degree of difficulty of grammatical features. These findings suggest teachers utilize beneficial effects of written recast as well as oral recasts.

9.1.2 Self-initiated Self-repair

The study which examined self-initiated self-repair attempts conducted by low-level high school students (Study 10) implied that it is unlikely that learners with low English proficiency would notice their own mistakes or errors to correct them. The study concluded that allowing low-level learners to converse freely may not necessarily lead to acquisition. However, studies conducted with a little bit higher level learners than ones in Study 10 showed relatively high success rate of self-initiated self-repair. The study also revealed that the occurrence and success rates of self-initiated self-repair vary according to the types of triggers with several pedagogical implications. Although there were some limitations, Study 12 implied low-intermediate learners can self-initiate to self-repair their grammatical errors regardless of grammatical difficulty of triggers. These two studies imply the importance of creating situations where students can self-initiate to repair their own errors and mistakes.

9.2 Implications

This section will present a general overall summary of pedagogical implications of the studies in the thesis. As recasts are not interrupting the flow of the communication without discouraging or demotivating students from continuing communication, they should be utilized with Japanese EFL learners who, in general, lack confidence in communication in
English. The effectiveness of recasts can vary according to several variables as were already mentioned in the previous chapters. Teachers should keep these variables, such as students’ proficiency levels, recasts features, and learning environment, in their mind in providing recasts. I would suggest that teacher training programs should be well designed so that teachers can learn how to provide recasts effectively to students. Not only oral recasts but written recasts should be well utilized in the writing class. Although it is heavy task for teachers to write feedback to students’ essays, it is worthwhile doing so by using written feedback in the form of recasts as this can contribute to the development of their writing, possibly motivating students more in learning writing. It’s very difficult to judge whether students noticed their errors or mistakes after their being given recasts. This study implied that it is not problematic for teachers to regard students’ repair after recasts as evidence of their noticing. This is rather a desirable implication for teachers since conducting simulated recall interviews and pre/post tests with students are impractical in actual classroom environment.

As for implications suggested by studies on self-initiated self-repair, as low-level learners are less likely to self-initiate to correct their errors, teachers may have to use negative or positive feedback without having high expectation on learners’ self-initiated self-repair. However, in teaching relatively higher level learners, teachers can expect learners’ own corrections by giving time to do so. It is also important for teachers to know that prospect of success in self-initiated self-repair is different according to the types of triggers so that they can decide whether they should give feedback such as recasts immediately after learners’ errors or expect their own corrections.

As is mentioned in Chapter 1, it is crucial for students to notice their own errors by themselves to repair them in a learning environment where they are not always communicating with teachers or more proficient speakers who can provide feedback such as
recasts. Even when they are interacting with teachers, they should ideally self-correct their own errors because the act of self-initiated self-repair is a higher level of cognitive activity, positively accompanied by noticing the gap, than noticing an L2 example provided by feedback such as recasts (Egi, 2010).

The results of the studies in the thesis imply that teachers may have to provide correct forms in the form of recasts after making time or opportunities for students to self-initiate to self-repair their errors. The findings also suggest that this is especially so while interacting with higher level learners. Teachers could, at first, provide opportunities of self-initiated self-repair and then supply recasts as a last resort so that learners finally can produce reformulated correct utterances. It can be very difficult to decide when and how to supply what kind of recasts to learners, but it is pedagogically crucial for teachers to understand the different effects of recasts according to various variables as well as the mechanism of self-initiated self-repair explained in detail in this thesis.

9.3 Limitations

There a number of limitations in the present thesis. Since they already are pointed out in the previous chapters, three crucial limitations will be noted in this chapter. First, except for studies that examined learners’ noticing (Studies 5 and 6 in Chapter 5), systematic retrospective interviews with all of the students were not conducted. It can be argued that findings and interpretations of results in the studies should be considered cautiously. Ideally, though it is practically difficult, to confirm the interpretations of the observed phenomena, retrospective interviews should be systematically done with all of the students and the interlocutors.

Second, statistical analyses were not conducted in several quantitative studies. In those studies raw frequencies or percentages were shown to interpret the results. Even when
statistical analyses were conducted, appropriateness of the measurements can be questioned. In Studies 5 and 6, for example, the cases of recasts for the three participants were merged into one set of data because of the reason that English learning backgrounds and English proficiencies were not so different. However, it can be argued that this would not be an appropriate step for basic analysis with descriptive statistics and can violate assumptions of independence of the inferential statistics tests that were subsequently used. To what extent we, researchers in this area, should be strict on statistics can be a topic of discussion, but more robust statistical methods that can make interpretations more convincing should be needed.

Third, in the studies, the numbers of the participants who participated in the studies were relatively small. It can be argued that individual differences, such as proficiency level, working memory, grammatical sensitivity and motivation as well as their learning environment (e.g., accuracy-oriented or fluency-oriented class, teacher-centered or student-centered class) can interact with the results of the studies on recasts and self-initiated self-repair. With more participants in each study, we could have drawn more firm conclusions.

9.4 Future Research

There remain several issues we have to take into account in addition to limitations pointed out above. Learners’ affective factors established by, for example, the teacher-student relationship, emotions triggered by the teachers and their classroom management, may impact learners’ perceptions of and receptivity to recasts. In the present thesis, interlocutors were either native speakers or non native speakers of English. This teachers’ nativeness could have also affected learners’ performances in the interactions. Thus, learners’ affective factors influenced by teachers and teacher-student relations should be explored in future study.

As is briefly mentioned earlier, motivation should be one of the most important issues. Indeed, motivation can be one of the factors that determines success or failure of learners’
self-initiated self-repair and successful uptake after recasts. It can safely be assumed that those learners who are high willing to produce correct utterances would be more sensitive to their own errors and recasts provided after them so that they can produce better utterances than those who are not willing to correct errors. During the studies, I, as a teacher-researcher, often observed or felt that students who did not seem to be highly motivated to learn in the class performed badly (e.g., tried not to self-initiate to repair errors or listen carefully to the interlocutors’ feedback). It can be difficult to conduct studies that can control motivational factors since learners’ motivations are not static but state-dependent, but future studies should ideally shed light on this issue.

In the studies of this thesis, three interlocutors had interactions with the students. It seems that their provision of recasts differed in its goal. Even by the same interlocutor, depending on the context, recasts were provided with different goals. They were provided sometime as linguistic correction with the interlocutors’ focus on linguistic accuracy whereas in other situations as a way to facilitate communication with the interlocutors’ focus on meaning. Whether the interlocutors’ focus was on linguistic correction or content instruction could have affected not only learners’ successful uptake after recasts but their successful self-initiated repair. In future research, the relationship between the interlocutors’ goals (whether it is intentional or unintentional) and learners’ performance should be examined.

Some learners may prefer recasts while some may prefer self-correction. Yoshida’s study with Japanese EFL learners’ (Yoshida, 2008) revealed that both teachers and learners tended to believe self-correction more effective despite the fact that teachers preferred to use recasts because of time efficiency. In the previous section, it was implicated that learners should, at first, be given opportunities for self-initiated self-repair followed by the provision of recasts. However, that can be just a theoretical claim derived from a limited number of studies. Future research should be one which sheds light on how and when teachers should or should not
provide corrective feedback such as recasts.

Finally, the present thesis that consists of several studies has shown some useful findings for teaching in the Japanese EFL environment. However, my findings may not be generalized to every English classroom due to the limitations mentioned earlier. More studies of this kind, especially focusing on self-initiated self-repair and recasts are needed for deeper understanding of them.
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Appendices

Appendix A: Play-acting… Select oral communication I (三省堂)を参考に改訂

二人でペアになり、以下の会話をについて

① 役割を決めて、スクリプトを見ながら会話をしてください

② 次に自分のパートを出来るだけ暗記して会話をしてください（暗記できなかったり、会話の途中で忘れてしまったら自分の言葉で会話を続けなさい）

③ 役割を変えて①、②と同じ活動をしてください

Dialogue

Mai: Oh, you are very tall, Ken!

Ken: Yes. Everybody says so.

Mai: If I were you I would play basketball.

Ken: I don’t like it. Mai, you are good at English.

Mai: Thank you. I study English every day.

Ken: I would try to make American friends if I were you.

Mai: I see, but our English teacher speaks English very well.

Ken: But I think if he were an American his English class would be better.

Appendix B: Skeleton dialogue… Select oral communication I (三省堂)を参考に改訂

以下の会話について、

① 役割を決め、空欄を埋めながら会話をしてください（英文は見てもかまわない）

② 次に英文を見ないで会話をしてください

③ 役割を交代し、①、②の活動を繰り返してください
Dialogue

Mai: Which country do you want to visit?

Ken: I want to visit [国家名].

Mai: Why?

Ken: Because [国家名] is famous for [何でも可].

または because [国家名] is [何でも可].

Mai: If you had a lot of money what would you buy in the country?

Ken: I would [その国で買う物を答える].

Mai: [自由に会話する]

Ken: [自由に会話する]

(以後、自由に英語で会話を続けてください)

Appendix C: Interview… Select oral communication I (三省堂)より

もし自由な時間がたくさんあったら何をするか、出来るだけ多くの人にインタビューして表に名前と、何をするかについて書いてください。又それ以外の質問を一つ加えて、その人の情報を聞き出し、以後自由に会話を続けてください（質問は何でもいいです）

※ 出来るだけ何も見ないで会話すること

※ 完全な英文で会話するようにすること

<table>
<thead>
<tr>
<th>名前</th>
<th>何をするか</th>
<th>その他の情報</th>
</tr>
</thead>
</table>

質問例 If you had a lot of time what would you do?
Appendix D: Questionnaires

Q 1. あなたは英作文でのフィードバックを大事だと思いましたか
1.全く思わない 2.ほとんど思わない 3.どちらでもない 4.どちらかというと思う 5.強く思う
1.または5を選んだ人はその理由を簡単に書いてください

Q 2. あなたは英作文でのフィードバックを参考に書き直しましたか
1.全く参考にしなかった 2.ほとんど参考にしなかった 3.どちらでもない
4.どちらかというと参考にした 5.大いに参考にした
1.または5を選んだ人はその理由を簡単に書いてください

Q 3. あなたは英作文でのフィードバックを理解できましたか
1.全く理解できなかった 2.ほとんど理解できなかった 3.どちらでもない
4.どちらかというと理解できた 5.よく理解できた
1.または5を選んだ人はその理由を簡単に書いてください

Q 4. あなたは英作文でのフィードバックを望みますか
1.全く望まない 2.ほとんど望まない 3.どちらでもない 4.どちらかというと望む
5.強く望む 1.または5を選んだ人はその理由を簡単に書いてください

Q 5. 英作文でのフィードバックについての感想を自由に書いてください