

Task-Based Language Teaching in Offline and Online Child EFL
Contexts: the Effects of Textual Enhancement in Post-Reading Tasks
on Grammatical Development

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Thesis submitted for the degree of Doctor of Philosophy

2023

DECLARATION PAGE

I, Yoojin Chung, confirm that the work presented in my thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

ABSTRACT

For several decades, task-based language teaching (TBLT) has received much attention, as has the benefits of using tasks for language learning. However, previous TBLT research has mostly focused on the use of oral and written production tasks, while largely neglecting the role of tasks in second language (L2) reading. Furthermore, no empirical research has explored how incorporating textual enhancement into the post-task stage of task-based reading lessons may influence L2 grammatical development. To fill these gaps, this thesis intended to examine the extent to which textual enhancement in post-reading tasks affects child English as a foreign language (EFL) learners' reading comprehension and learning of target L2 constructions.

The present thesis reports on two empirical studies. Within a face-to-face classroom context, Study 1 examined how multiple task-based reading lessons involving post-reading tasks with textual enhancement affect Korean child EFL learners' reading comprehension and learning of the third person singular *-s* morpheme. A mixed-model ANOVA analysis revealed that post-reading tasks with textual enhancement aided the learning of the target form more than post-reading tasks with no enhancement, without disrupting the participants' reading comprehension.

Study 2 further investigated the effects of textual enhancement in post-reading tasks by including explicit instruction prior to task performance. The design, participants, and target form were similar to Study 1, except that Study 2 was conducted in an online setting. A series of Mann-Whitney U tests showed that explicit instruction before performing the post-reading task yielded significant improvements in learning the target form. Also, the study examined participants' interaction during the post-reading tasks and found that most language-related episodes (LREs) were related to spelling. Importantly, LREs related to the target form

occurred only minimally for all group conditions, suggesting that participants viewed the task as meaning-oriented both in the presence and absence of explicit instruction.

IMPACT STATEMENT

The present thesis explores the effects of post-reading tasks, with textual enhancement, on developing second language (L2) grammatical knowledge among child foreign language learners. The findings of the study contribute to advancing theory and research methodology in L2 reading studies and provide useful pedagogical implications for utilizing L2 reading tasks within the framework of task-based language teaching (TBLT) in face-to-face foreign language classroom and online settings.

First, this thesis provides novel insights into the practice of TBLT which has focused largely on oral and written production and little on L2 reading. By utilizing the post-task stage of a task-based reading lesson, the present thesis demonstrated that allowing learners to first process input (i.e., reading passages) for meaning and then to focus on form at the post-task stage was beneficial for L2 grammar development without compromising learners' reading comprehension. Additionally, the findings of the thesis contribute to existing theories on the importance of 'output' in L2 learning by examining language-related episodes which revealed written output to foster the type of interaction beneficial for L2 development.

Also, by examining child foreign language learners - an underexplored population in SLA- the present thesis provides useful information for elementary school teachers in foreign language contexts in terms of implementing TBLT in video synchronous computer-mediated (SCMC) and face-to-face instructional contexts. The findings of the current study partially confirm the pedagogical value of textual enhancement in promoting L2 grammatical development and offer further insight into the factors and contexts that influence the efficacy of textual enhancement.

Lastly, the findings of the study attest to the advantage of employing mixed methods research and triangulating different data sources to examine L2 reading tasks. The joint use of

quantitative (i.e., assessment tasks) and qualitative data (i.e., language-related episodes) in the thesis allows for a richer interpretation of the learning processes involved during task-based reading.

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24/2/2023

ACKNOWLEDGEMENTS

First and foremost, I would like to praise and thank God, my shelter, my refuge, and strength in need. He blessed me with many things throughout this journey and everything I have achieved along the way is by the grace of God which was with me.

I would like to express my deepest appreciation to my principal supervisor, Professor Andrea Révész, for giving me the opportunity to pursue my PhD, for her supervision, warm encouragement, and most of all for believing in me during times I was in doubt. She has helped me grow as a researcher by generously sharing her insights and knowledge in our field. She has helped me broaden my knowledge in various data collection methods and statistical analyses. It has been such an honour and such a valuable experience being supervised by her. I am deeply indebted to her for devoting her time and effort to support and guide me through this dissertation.

I would also like to thank my subsidiary supervisor, Professor Ana Pellicer-Sánchez, for her insightful suggestions regarding second language reading, and for providing valuable feedback during presentations given at doctoral seminars. I would also like to take this opportunity to thank my two viva examiners, Effrosyni Argyri and Parvaneh Tavakoli, for taking the time to carefully read my thesis and for their valuable and insightful feedback and suggestions.

I am also grateful to all members of the London Second Language Acquisition Research Forum for organizing annual PhD conferences and doctoral seminars. The insightful comments and challenging feedback received from this group have helped me grow as a researcher and develop a wider perspective about my work.

A sincere note of thanks goes to Jeeyun Pyo and the children at Guryong elementary school for making this thesis possible by participating in the two research studies. Without the help of Jeeyun Pyo, I would not have met these wonderful children as participants, especially during the pandemic.

My special thanks go to a very special friend, Arthur Lee, who walked the wilderness that my PhD was beside me. You made the journey so much more colourful. Thank you for being there during the happy moments and the sad ones.

Last but not least, I wish to express my eternal gratitude to my beloved family. I thank my two sisters, Jian and Seung-Ah, for their continuous moral support and prayers. I would not be here today without my loving parents, whom I still do not know with what faith decided to support my PhD, but I am grateful that they did and that it was not in vain.

엄마, 아빠 사랑합니다.

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CHAPTER 1

INTRODUCTION

In the field of second language acquisition (SLA), it has been widely recognized that comprehensible input is essential for acquisition to occur. As defined by Sharwood Smith (1993), input refers to “potentially processible language data which are made available by chance or by design to the language learner” (p. 167). Research, however, has shown that learners do not process all the input available to them (Corder, 1967). It is only the part of the input attended to by learners that becomes selected for further processing (Robinson, 2003; Schmidt, 1990). Based upon this understanding, the role of attention in mediating the process of selecting input for subsequent processing has garnered much interest in SLA research. Various frameworks such as Schmidt’s noticing hypothesis (1990, 1995, 2001), Tomlin and Villa’s model of attention (1994), Robinson’s model of attention and memory (1995, 2003), and Chun et al.’s model of internal and external attention (2011) support the notion that attention is necessary for converting input into intake, although disagreement exists regarding the relationship between attention, awareness, and second language (L2) learning. Given the central role of attention in SLA, various external interventions that may potentially increase the likelihood of L2 learners attending to target linguistic constructions have been proposed. Among them, several researchers have suggested employing focus-on-form pedagogical techniques, which aim to direct learner attention to linguistic features in contexts where learners’ primary attention remains dedicated to meaning (Long & Robinson, 1998).

Research on Task-based language teaching (TBLT) has also provided increasing evidence that engaging in tasks, accompanied with timely focus on form (Long & Robinson, 1998), can provide a facilitative environment for L2 development to unfold (Ellis et al., 2020). Tasks, defined as activities that involve learners in using “language, with emphasis on

meaning, to attain an objective” (Bygate et al., 2001, p. 11), appear to provide an ideal platform for integrating focus on form into meaning-focused activities. Reading tasks, in particular, can expose learners to plentiful input while also providing a venue for facilitating learner attention to L2 constructions. Among the focus-on-form techniques that can be utilized in the context of reading, textual enhancement has probably received the most attention. The theoretical rationale underlying textual enhancement stems from Sharwood Smith’s (1991, 1993) input enhancement hypothesis. According to this proposal, making linguistic features salient through techniques such as written (e.g., underlining) or oral (e.g., pausing) textual enhancement can raise the probability that learners allocate attention to and subsequently acquire the enhanced linguistic constructions (Robinson, 2003; Schmidt, 2001).

The effectiveness of textual enhancement on L2 learning has been widely investigated, and a meta-analysis of 16 studies (Lee & Huang, 2008) found that it has a small though positive impact on the acquisition of L2 grammatical knowledge. Most previous studies, however, took the form of one-shot, single treatment experiments, without providing sufficient time to pursue deeper processing of the enhanced input (Han et al., 2008). As textual enhancement is an implicit focus-on-form technique, it is likely to require repeated treatments over longer periods of time to evince its effects (Long, 2015).

Another reason for the small impact observed for textual enhancement in previous research might be that, due to textual enhancement being utilized in the during-task stage, the processing of texts posed extra processing demands on learners by prompting them to attend to form and meaning simultaneously (e.g., Han et al., 2008; VanPatten, 1990, 1996; S. Lee, 2007). Therefore, the question arises whether using textual enhancement might be more effective when it is implemented at a different stage of the reading lesson. Besides the during-task stage, focus on form can also be enacted in the pre-task and post-task stages of a task-based reading sequence, with the post-task stage probably providing the most optimal

condition to draw learners' attention to form without interrupting focus on meaning (Ellis, 2003). Nevertheless, only a handful of studies have examined the effects of post-reading activities on L2 development (e.g., Atay & Kurt, 2006; Yang et al., 2017), and none of these have been situated in a task-based context.

In addition, some researchers have suggested that providing explicit instruction on the target form when using textual enhancement may render more positive results (e.g., Indrarathne & Kormos, 2017; Leow & Martin, 2017; Shook, 1994; Winke, 2013). However, the provision of explicit instruction before performing a task has been controversial due to its potential to compromise primacy of meaning during task performance (Ellis, 2003; Willis & Willis, 2007). Also, some studies have shown pre-task explicit instruction to have an adverse effect on overall task performance (e.g., Ellis et al., 2019; Van de Guchte et al., 2019). Since textual enhancement as well as tasks are widely used tools in the language classroom, there is a need for further research investigating the conditions in which textual enhancement might work best and how they may affect learners' task performance.

A further gap in previous research on textual enhancement as well as TBLT concerns a lack of attention to child foreign language learners. Although foreign language programs are increasingly introduced at elementary school level, this population remains underrepresented in instructed SLA research in general (Collins & Muñoz, 2016). Moreover, there is a lack of research examining the collaborative interaction that take place while children complete communicative tasks (García Mayo, 2018). Given the limited availability of input in foreign language contexts, it is crucial to examine whether peer interaction during task performance provides learning opportunities for children, and if these opportunities are the same across different modes of learning (i.e., face to face vs. synchronous computer-mediated communication).

Previous research examining the nature of learners' interaction in computer-mediated collaborative writing tasks have shown evidence that learners collaborate differently in synchronous computer-mediated communication compared to face-to-face. For example, learners may divide the labour with one person taking on the role of the writer and the other acting as the language editor instead of co-constructing the text together (Roushad & Storch, 2016), discuss relatively superficial language features such as punctuation (Kessler et al., 2012), or perceive the online context as a space only appropriate for content-related discussions rather than for language-related deliberations (Elola & Oskoz, 2010). However, the majority of these studies have been conducted in written text-chat environments, and relatively little research has explored L2 interaction in video synchronous computer-mediated communication (e.g., Bueno-Alastuey, 2011, 2013; Jepson, 2005; L. Lee, 2007; Yanguas, 2010, 2012; Yanguas & Bergin, 2018). Given the documented benefits of interaction on L2 learning, and with technological advancements continuously redesigning the language classroom, it seems essential to examine peer interaction in video synchronous computer-mediated contexts.

1.1. Aims of the Thesis

In order to address the gaps outlined in the previous section, the present thesis conducted two studies. The overarching goal of the studies was to examine the impact and pedagogical value of textual enhancement, included in post-reading tasks, on developing L2 grammatical knowledge. The studies focused on child foreign language learners, a much-neglected population in the field of SLA. To provide sufficient time for any effects of textual enhancement to manifest, a multiple-exposure design was adopted rather than a one-shot experiment. Another novelty of the present thesis is that conditions for sequential rather than

simultaneous processing of meaning and form associated with the target construction were created by using the post-task stage as a platform for focus on form.

The goal of Study 1, situated in a face-to-face classroom context, was to investigate the potential of textual enhancement versus no textual enhancement in post-reading tasks on developing knowledge of the target linguistic construction by forming the following research questions:

1. To what extent does textual enhancement in post-reading tasks affect the acquisition of third person singular *-s* among child EFL learners?
2. To what extent does textual enhancement in post-reading tasks affect the reading comprehension of child EFL learners?

The independent variable for Study 1 was *textual enhancement*, which entailed typographically enhancing the target linguistic construction by boldfacing the verbs and underlining the morpheme *-s* that were embedded in the post-reading task. The dependent variable was the *development* by the participants observed from the pretest to the posttest, where development was defined as gains in knowledge of the target form. The *effects of textual enhancement in post-reading tasks on L2 grammatical development* were assessed in terms of whether learners showed improvements in their knowledge of the target form on the posttest compared to the pretest as a result of completing post-reading tasks with textual enhancement versus no textual enhancement over six treatment sessions.

As a follow up, Study 2, which was carried out in a computer-mediated context due to the COVID pandemic, further explored the effectiveness of textual enhancement in post-reading tasks by including a new independent variable, explicit instruction. The study was guided by the following research questions:

1. To what extent does explicit instruction prior to performing a post-reading task with textual enhancement affect the acquisition of third person singular –s among child EFL learners?
2. To what extent does post-task explicit instruction affect the number, linguistic focus, and outcome of LREs?

In other words, *explicit instruction*, defined as a 1-minute grammar lesson about the target form, was either given or not given to participants before performing the post-reading task to investigate the extent to which explicit instruction accompanied by textually enhanced post-reading tasks can develop L2 grammar. To address the research questions, a few methodological advances were made. Language related episodes (LREs) were expected to take place during task performance and provide information about whether explicit instruction influences learners' reflections on their language use and thereby facilitate L2 learning. Additionally, two separate assessment tasks were administered to measure declarative and procedural knowledge of the target linguistic construction. Lastly, a delayed posttest was administered to observe whether any resulting effects were retained.

1.2. Structure of the Thesis

The remainder of the present thesis is comprised of four chapters. In Chapter 2, the theoretical background of the study followed by an overview of previous research relevant to the current study are presented. Chapter 3 reports on the design and methodological procedures undertaken for Study 1. It begins by introducing the participants and the ethical considerations for conducting the research, followed by a description of the study design, the

target linguistic construction, the instruments used to collect data, and a discussion of the data analysis procedures. After the methodology, the results are presented, succeeded by a discussion of the findings according to each research question. Chapter 4 is devoted to presenting Study 2 and has a similar structure to Chapter 3 (Study 1). Finally, Chapter 5 summarizes and draws conclusions on the findings of Study 1 and 2 and discusses theoretical and pedagogical implications for practice and future research.

1.3. Definitions and Operationalisation of Key Terms

1.3.1. Input

Input refers to language data that are potentially available to learners (Corder, 1967). It is language that is heard and/or read by the learner and can be subject to further processing for meaning.

1.3.2. Output

Output refers to the production of language (i.e., speaking or writing) by learners. It has been claimed that output provides opportunities for learners to process language in ways that are different from comprehending language. According to Swain (1995), when learners produce language (i.e., output), they may ‘notice’ a gap between what they wish to say and what they are able to say, which in turn helps them acknowledge what they do not know or only partially know. Swain specified three functions of output in L2 learning: (1) the noticing function, (2) the hypothesis-testing function, and (3) metalinguistic reflective function.

1.3.3. Attention

It is generally accepted in SLA that attention plays a key role in language learning. Researchers have observed that learners do not process everything in the input afforded to them, and some level of attention is required for input to become intake (e.g., Chun et al., 2011; Robinson, 2003; Schmidt, 1990, 1995, 2001; Tomlin & Villa, 1994). According to Chun et al. (2011), attention is a multiple system consisting of two attentional systems: internal and external. Internal attention refers to the selection and modulation of information that is internally generated, while external attention is concerned with selecting and modulating sensory information that is created by external cues such as through manipulation of visual stimuli.

1.3.4. Task

According to R. Ellis (2003), a task can be defined as an activity that satisfies the following six criteria: (1) serves as a workplan, (2) is primarily focused on meaning, (3) involves processes of language use that take place in real-world communication, (4) involves using any of the four language skills, (5) requires learners to engage in cognitive processes such as ordering, classifying, and reasoning, and (6) has a clearly defined non-linguistic outcome. A task can entail a focus on language but within a larger meaning-oriented context, which is a defining trait that differentiates a task from a traditional exercise.

1.3.5. Textual enhancement

Textual enhancement is an implicit type of focus on form technique which uses typographical modifications such as underlining, **boldfacing**, *italicization*, CAPITALIZATION, colour-coding or using different font types to increase the perceptual salience of specific

linguistic features. The underlying rationale for textual enhancement is that by making linguistic features salient, the possibility that learners allocate attention to and subsequently acquire the enhanced linguistic is increased (Sharwood Smith, 1991, 1993).

1.3.6. Explicit Instruction

As a type of explicit focus on form technique, in the present thesis, explicit instruction is operationalized as explicit explanation of the grammatical rule to increase the salience of the target linguistic construction and thereby draw learners' attention or focus to it.

1.3.7. Language Related Episodes (LREs)

A language related episode is defined as any part of a dialogue between students where the language they are producing is being discussed (Swain & Lapkin, 1998). Instances of LREs can include deliberations about the meaning, spelling, and/or pronunciation of L2 linguistic features, or involve explicit or implicit correction of one's own or other's use of a word, form, or structure (Leeser, 2004). Such dialogue that arises during pair or group work while performing tasks has been claimed to represent L2 learning in progress, with studies reporting a positive relationship between LREs and L2 development (Gass & Mackey, 2007; Swain & Lapkin, 2001).

CHAPTER 2

LITERATURE REVIEW

This chapter presents the theoretical framework and reviews previous empirical findings relevant to the present thesis. First, an overview of task-based language teaching is provided, followed by Khalifa and Weir's (2009) model of second language (L2) reading and a review of previous studies that have used various L2 reading activities. Next, different theoretical perspectives on attention and awareness are discussed which provide important rationale for using Focus on Form to promote L2 development through L2 reading. Then, as a focus-on-form pedagogical technique, textual enhancement and explicit instruction are introduced along with previous findings on their effectiveness for developing L2 grammatical knowledge. Finally, the role of interaction in second language acquisition is discussed accompanied by previous empirical findings on how language-related episodes that arise during L2 interaction in face-to-face and video synchronous computer-mediated contexts can foster L2 development.

2.1 Task-Based Language Teaching

2.1.1. The Emergence of Task-Based Language Teaching (TBLT)

In the 1980s, TBLT emerged as a response to the dissatisfying outcomes of prevailing traditional teacher-centered and form-oriented teaching methods at the time (Norris, 2009). Its pedagogic origin is in Communicative Language Teaching (CLT), an approach that has had a major impact on second language practice throughout the world. From the 1960s onwards, different veins of research such as those in first language acquisition highlighted the possible importance of designing educational activities that involved social interaction, especially the kind of social interaction that learners would engage in outside the classroom. This led to a

paradigm shift from discrete, teacher-dominated, form-oriented language education to more holistic, learner-driven, and meaning-focused activities (Van den Branden et al., 2009). The ideas of the CLT approach were generally in harmony with this shift in paradigm which contributed to its popularity from the 1970s.

The primary focus of CLT is to develop learners' ability to use language in real-life communication. Unlike earlier methods, CLT draws on different models of language, namely on a functional model of language (Halliday, 1986) and a theory of communicative competence (Hymes, 1971). CLT is not a uniform approach and a distinction can be made between a weak and strong version of CLT (Howatt, 1984). The weak version claims that communicative competence can be broken down into its components then systematically taught to learners. The instructional content aims at teaching students how to realize general notions such as 'duration' and 'possibility' and language functions such as 'inviting' and 'apologizing,' but the methodology remains generally the same as traditional synthetic approaches. Contrarily, the strong version emphasizes acquiring language through communication (Howatt, 1984). It posits that learners discover the language system themselves by using it during communication rather than acquiring language elements first and then learning how to use it.

TBLT represents a strong version of CLT, and it uses tasks as the core unit of planning and designing syllabus (R. Ellis, 2003). TBLT provides opportunities for learners to use the target language communicatively and to develop language proficiency by engaging in meaningful tasks. It is also important to distinguish TBLT from task-supported language teaching, which also makes use of tasks but parallels a weak version of CLT. Unlike TBLT, task-supported language teaching views tasks as a means of providing communicative practice for language features that have been presented in a more traditional way. Teaching is not based on tasks like in TBLT but on linguistic content such as grammatical features or notions and functions (R. Ellis, 2003). In other words, a task in task-supported language teaching is used to

give opportunities for learners to produce correct use of target language features which have been explicitly taught, and the tasks are designed to specifically elicit the use of target forms.

Drawing a distinction between the two main approaches to syllabus design, namely synthetic and analytic (Wilkins, 1976), may help better understand the approach taken by TBLT. Traditional synthetic syllabuses are typically built around discrete linguistic units of analysis, such as lexical items, grammatical structures, notions, and functions. These are sequenced from simple to more complex, and each item of content is presented in a serial manner. The learners are then expected to integrate and synthesize the isolated linguistic features for use in real-world communication. According to Long and Crookes (1992), one of the key problems of synthetic syllabuses is that they introduce linguistic forms separately and aim to elicit instant target-like mastery of these forms. This, however, is based on a model of language learning uncorroborated by research in second language acquisition (SLA). Contrary to how synthetic syllabuses are built, research in SLA shows that learners pass through fixed developmental sequences (Pienemann, 1985) with rate of progress being affected by the relationship between the learner's first and second language. Progress is also rarely unidirectional involving temporary deterioration in learner behaviour, also referred to as backsliding (Meisel, Clahsen, & Pienemann, 1981; Selinker & Lakshamanan, 1992), and U-shaped or zigzag learning curves (Kellerman, 1985). Also, Corder (1967) argues that regardless of what is taught, learners follow their own 'built-in syllabus' when acquiring language forms, which is largely ignored in synthetic syllabuses. Another flaw is that synthetic syllabuses are external to the learner, meaning that learning goals and linguistic contents are decided by those other than the learners. Thus, it does not take into account who the learners are and what they need (White, 1988).

In response to the shortcomings of synthetic syllabuses, analytic approaches to syllabus design were introduced. Analytical syllabuses expose learners to rich input where the target language is presented in 'chunks' without linguistically controlling the learning environment.

Learners are given opportunities to engage in meaningful communication (Long, 2015) and their role is to perceive patterns in the input and induce underlying rules (Long & Crookes, 1992). Thus, as the label ‘analytic’ suggests, learners are given the chance to analyse the relation between structures and the corresponding contents (Pienemann, 1985). All types of syllabus designs that are not built around prior analysis of the language into its individual linguistic items are categorized as analytical syllabuses. Among the teaching approaches that adopt an analytic syllabus, task-based language teaching has received much attention as a promising instructional approach, given that using tasks as the basic unit of analysis has the potential to create an environment conducive to second language learning.

2.1.2. Definition of ‘task’

Since tasks are the basic organization unit of task-based language teaching, it is important to clarify what we mean by tasks. Long (1985) gives a broad definition of tasks by including all activities people do in their everyday lives. Nunan (2004), however, asserts that although Long’s definition of tasks is closely related to the real-world, tasks in language teaching and research should be defined from a pedagogical perspective. The following are a few definitions put forward by various researchers of what a pedagogical task is (e.g., Bygate et al., 2001; Nunan, 2004; Richard et al., 1985; Skehan, 1998).

- (a) A task is “an activity which requires learners to use language, with emphasis on meaning, to attain an objective” (Bygate et al., 2001, p. 11).
- (b) A task is “a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form. The task should also have a sense of completeness, being able to stand alone as a communicative act in its own right with a beginning, a middle and an end” (Nunan, 2004, p. 4).
- (c) A task is “an activity or action which is carried out as the result of processing or understanding language, i.e., as a response. For example, drawing a map while listening to a tape, listening to an instruction, and performing a command may be referred to as tasks. Tasks may or may not involve the production of language. A

task usually requires the teacher to specify what will be regarded as successful completion of the task. The use of a variety of different kinds of tasks in language teaching is said to make teaching more communicative... since it provides a purpose for classroom activity which goes beyond practice of language for its own sake” (Richard et al., 1986, p.289).

- (d) A task is “an activity in which: meaning is primary; there is some communication problem to solve; there is some sort of relationship to the real world; task completion has some priority; and the assessment of the task is in terms of outcome” (Skehan, 1998, p. 95).

It should be noted that there is no complete consensus on what constitutes a task. Bygate et al. (2001) argue that definitions of task will need to be adapted according to the different purposes the tasks are being used for, such as for instruction and learning, or testing and assessment. Although this may be true, there is also a need for a more generalized definition that can be applied across contexts and purposes (Ellis, et al., 2020). In this respect, R. Ellis’s (2003) definition helps identify the key commonalities in tasks, regardless of their actual use, by claiming that a task: (1) should serve as a workplan, (2) be primarily focused on meaning, (3) involve processes of language use that occur in real-world communication, (4) can involve the use of any of the four language skills, (5) requires learners to engage in cognitive processes such as classifying and reasoning, and (6) have a clearly defined outcome other than the use of language (p.10). This definition also helps distinguish tasks from traditional language learning exercises. For example, an exercise is an activity designed to provide learners with practice in using specific language items. Therefore, an exercise is primarily form-focused, and the knowledge and use of linguistic skills are a prerequisite for engaging in exercises. Conversely, a task is primarily meaning-focused although learners may momentarily pay attention to form. A task also requires learners to function mainly as “language users” rather than mere “learners” and engage in similar kinds of communicative processes as those expected in real-world activities.

The present thesis adopts R. Ellis' definition of a task as it can be applied across various contexts and learners (See also Section 2.1.4.). Additionally, his definition makes it clear that tasks can involve oral or written skills and can be input- or output-based. According to R. Ellis (2018), both researchers and teachers are misguided into thinking that a task must involve speaking. A possible reason for this misunderstanding may be that a bulk of task-based research involves tasks that require an exchange of information between a speaker and listener, that is, speaking tasks. Reading tasks, however, seem to hold key acquisitional benefits. For example, they can provide opportunities to expose learners to rich input (R. Ellis, 2018; Krashen, 2004), which is generally agreed in the field of SLA to be essential for L2 acquisition to occur. Nevertheless, although there is extensive literature on the positive impact of L2 reading on learning various L2 features such as vocabulary and grammar as well as reading skills, (e.g., Grabe & Stoller, 2011; Krashen, 2004; Lee et al., 2015; Mermelstein, 2015; Pellicer-Sánchez, 2016, 2017; Webb & Chang, 2015), only a handful of studies on L2 reading have been situated in a task-based context (See Section 2.2.3.). Given the documented benefits of reading, exploring the learning potential of readings tasks seems to be a key gap to fill in TBLT research.

2.1.3. Task Types

Besides understanding what constitutes a task, another issue that designers of a task-based syllabus and teachers employing tasks need to consider is the type of tasks to be used. One way of classifying different types of tasks is to consider the communicative and cognitive processes involved, such as whether the task entails one-way or two-way communication and whether the output is open-ended or closed. For example, an information-gap task can be one-way in that one person holds all the information or two-way in that both students need to exchange information to achieve the outcome of the task. Information-gap tasks often require

a single outcome, which makes them ‘closed’ tasks. A specific example of a closed two-way task is a jigsaw story-telling task where the information needed to complete the task is divided among several learners. Only when all the information is shared will the students be able to see the entire picture or story. Contrary to a closed task, an ‘open’ task allows several outcomes to be possible. For instance, an opinion exchange task involves students exchanging personal preferences, attitudes, or feelings towards a given situation such as completing a story and participating in discussions.

Tasks can also be classified according to whether they are input- or output-based. Input-based tasks are those that take the form of listening or reading tasks. These tasks only require learners to process the input given and demonstrate they have successfully done so by, for example, choosing a picture that matches the input stimulus. In other words, the completion of the task does not call for production in the L2, although learners can if they wish to. On the other hand, output-based tasks do require the learners to speak or write to complete the task. As mentioned earlier, it is commonly misunderstood in TBLT that tasks must involve production due to the overwhelming research focusing on output-based tasks (R. Ellis, 2018; Shintani, 2012). However, it is unrealistic to expect complete beginners to engage in free production while performing a task. Therefore, input-based tasks may be a more suitable option, given that they can be designed to only require non-verbal responses from learners. Also, as previously mentioned, input-based tasks offer learners the opportunity to get exposed to rich input, which is generally regarded as essential for L2 acquisition to occur.

Tasks can also be focused or unfocused (R. Ellis, 2003). Unfocused tasks are designed to elicit the use of language in general, whereas focused tasks are intended to provide opportunities for students to use specific language features. However, there are contradicting views among advocates of TBLT on whether focused tasks should be classified as tasks. In justifying the use of focused tasks, R. Ellis (2018) argues that they are different from traditional

grammar exercises since focused tasks satisfy the criteria for tasks, and the target linguistic feature is kept hidden from the students. Rather, the main concern with focused tasks would be designing them so that they successfully elicit the use of the target language features. In considering how to design effective focused tasks, Loschky and Bley-Vroman (1993) make a distinction among the notions of task naturalness, task utility, and task essentialness. Task naturalness involves designing a task so that the target construction arises ‘naturally’ while performing the task although the task can be completed without it. As for task utility, the use of the target structure will make the task easier although it is possible to complete the task without it. Tasks that involve task essentialness can only be completed with the use of the target structure. Loschky and Bley-Vroman, however, point out that task essentialness can be achieved through comprehension tasks, but it is almost impossible to realize with production tasks. In a similar vein, Doughty and Williams (1998) suggest aiming for task naturalness and task utility when designing tasks that require production.

In sum, tasks can be classified in various ways. They can be one-way or two-way, open-ended or closed, input- or output-based, and be focused or unfocused. Classifying tasks in this manner can help syllabus designers include a variety of tasks and identify the types of tasks suitable for specific needs or groups of learners. It can also provide a framework for teachers to systematically experiment with different tasks in order to determine which types work best for their students. In this respect, classifying tasks is a necessary step in constructing a task-based syllabus. The next section will further discuss developing a task-based syllabus by presenting three influential task-based approaches to syllabus design.

2.1.4. Task-based Syllabus

Among the proposals put forward on how to design a task-based syllabus, Long, Skehan, and R. Ellis’ proposals are primarily grounded in SLA theory and research findings. Thus, they

will be the main subjects of the discussion here. Although the three proposals share their origins to some degree, they vary in their conceptualization of task-based language teaching in terms of scope and focus. The focus in Long's task-based syllabus is to prepare learners to be able to complete specific real-world tasks. Long and Norris (2000) propose six steps in designing, implementing, and evaluating TBLT. The first step is to perform a needs analysis to uncover real-world target tasks learners are preparing for. Long defines target tasks as "the hundred and one things people do in everyday life, at work, at play and in between" (Long, 1985, p. 89). For example, target tasks for foreign language learners planning to start a study-abroad program may include registering at a university, attending lectures, reading journal articles, and asking for directions. After identifying the target tasks, the next step is to classify them into target task-types. This involves creating more abstract, superordinate categories so that target tasks with similar qualities can be grouped together. For instance, the target tasks of "checking lifejackets", and "checking oxygen bottles and air masks", for a flight attendant can all be classified under "inspecting emergency equipment". From these target task-types pedagogic tasks are derived and sequenced to form the task-based syllabus. Pedagogic tasks are simpler versions of target task-types, and the complexity of these tasks gradually increase as the learners' ability to perform the tasks improves. Here, the simplicity and complexity of the tasks will not be determined by linguistic complexity but by the cognitive complexity of the pedagogic tasks themselves. Tasks can be simplified in various ways such as breaking a target task down into smaller components or sub-tasks or engaging learners in pre-tasks to build relevant background information to carry out the tasks. Once the task-based syllabus is formed, it is implemented in the classroom by appropriate methodology and pedagogy. Long (2015) lists ten methodological principles in TBLT such as providing rich input, focus on form, and promoting cooperative learning. These methodological principles are instructional design features that are firmly grounded in SLA research, educational psychology, philosophy of education, and general

educational curriculum design. If methodological principles indicate what should be done, pedagogic procedures propose how it can be done. Pedagogic procedures, which are usually determined by the classroom teacher, should take into consideration factors such as the learners' age, aptitudes, learning preferences, proficiency, or the saliency of target forms. Lastly, the final stage is task-based language assessment and program evaluation. Long proposes six main steps in developing and implementing task-based assessment which will not be discussed in detail as it goes beyond the purpose of this thesis.

Skehan's (1998, 2021; Skehan & Foster, 2001) approach to TBLT mainly comes from a cognitive and information processing standpoint. Skehan focuses more on creating an ideal psycholinguistic and cognitive environment so that balanced language development can be attained, especially in the performance areas of accuracy (i.e., the learners' capability to use the target language correctly), complexity (i.e., the learners' ability to use more elaborate and advanced interlanguage structures), and fluency (i.e., the learners' capacity to use their linguistic resources to communicate in real-time). In terms of selecting and sequencing tasks, Skehan suggests taking into consideration the degree of negotiation of meaning, task difficulty, and the selective effects of tasks. This view differs greatly from Long's who uses needs-analysis as a basis for selecting tasks. Skehan does not consider needs analysis an essential component of TBLT, although desirable, on the grounds that it may be difficult to carry out in practice. To further illustrate, Skehan lists several tasks that can potentially produce greater degrees of active involvement which in turn can create more opportunities for negotiation of meaning. This is based on the premise that tasks that foster greater negotiation of meaning generate conditions more suitable for interlanguage development (Long, 1996), and lead to better quality input. Also, drawing on his model of Limited Attention Capacity (1998, 2018), Skehan argues that tasks that are too demanding for the learner will require more attentional resources for task completion, which can lead to less attention being available to attend to form. Conversely,

selecting tasks that are appropriately challenging for the learners can create higher chances of noticing to occur, balanced language performance to be achieved, and for spare attentional capacity to be directed toward more effective use. Hence, TBLT should focus on task difficulty as an essential condition for any task work. Lastly, Skehan asserts that tasks can have selective effects on language performance. Therefore, to ensure balanced development, tasks should be sequenced so that those which focus on different areas of performance (i.e., accuracy, complexity, and fluency) follow one another in a systematic manner.

R. Ellis' task-based syllabus differs from both Long and Skehan's in that the teacher's role in the classroom and the individual differences of learners are taken into account. Ellis (2003) refers to a distinction between task-as-workplan and task-as-process. The former concerns syllabus design and the latter methodology. Ellis confines the function of the syllabus to a workplan for teachers which can facilitate their learners to acquire competence in the language as opposed to training learners to complete a specific set of tasks. Ellis claims that the syllabus should not function to control the procedures exercised in the classroom but should provide necessary resources and freedom to teachers so that they can address the needs of different learners as well as the variations in classroom dynamics. Ellis also differentiates between two types of task-based syllabuses. One is based completely on unfocused tasks and developing this type of syllabus only requires specifying which tasks to include. The other type of task-based syllabus is one that is based on focused tasks. In the case of this type of syllabus both the tasks and the linguistic content to be taught must be specified. For either syllabus, the selection of tasks involves deciding the thematic content of the tasks and the types of tasks to be used. Ellis states that different approaches to task selection are required for different learners. For those learning the target language for specific occupational needs, Ellis agrees with Long in that a needs analysis should be carried out. For children or general-purpose language learners, however, Ellis draws upon the work of Prabu (1987) and suggests selecting tasks based on the

interests of learners as well as their previous experience or familiarity with the tasks. Once the tasks have been selected, Ellis proposes sequencing and grading tasks based on four aspects: (1) the amount of input they provide, (2) the interactive conditions they require (3) the reasoning they entail, and (4) their final outcomes. However, these criteria are suggested to be used only as a general guideline. Rather, Ellis suggests course designers to evaluate the complexity of tasks intuitively and then use the criteria to assess how reliable their assessment is.

Although the three approaches to task-based syllabus design discussed so far have their differences, they are all grounded in the essential principles of TBLT such as building a syllabus around tasks that are primarily meaning-focused and providing opportunities to attend to form within this context. Each approach has its advantages and disadvantages and therefore will be suitable for some instructional contexts and not so much for others. Given that the present thesis focuses on children learning English in a foreign language context, it adopts R. Ellis' position on the task-based syllabus due to its adaptable approach to selecting tasks for different learners and contexts. In an EFL context, it is highly unlikely that children will use the foreign language much outside the classroom. Hence, their everyday life does not immediately provide a needs-related syllabus for foreign language learning, although this is what Long contends to be necessary in a task-based syllabus. On the other hand, school activities are more in line with what children do on an everyday basis. In this sense school activities, such as singing songs in English, could be considered real-world tasks to this population (Cameron, 2001) as long as they adhere to the task criteria set out by Ellis (2003).

2.1.5. The Three Phases of TBLT

In addition to building a task-based syllabus, procedures that describe how the activities in the syllabus can be turned into a task-based lesson need to be established. Several proposals

have been made on how to implement a task-based lesson (e.g., Skehan 1996; Willis 1996), but they all have three key phases in common: a pre-task, a during-task, and a post-task phase. Whilst it is not imperative to follow all three stages, it is recommended that teachers use the framework as a basis for planning task-based lessons. R. Ellis (2003) recommends that a lesson at least consists of a during-task phase and optionally include a pre- or post-task phase or both. With a basic structure set, teachers can then decide the specific options to include in each phase of the lesson. Also, they can decide the pattern of interaction the tasks will involve such as whether students will complete the tasks as a class, in pairs or groups, or individually.

The pre-task stage involves a range of activities that students can do before the main task. The purpose of the pre-task phase is to motivate learners and to prepare students to carry out the main task in ways that will facilitate acquisition (R. Ellis, 2003, Ellis et al., 2020). Various activities can be included in the pre-task stage, but pre-task planning is the most widely researched option (Ellis et al., 2020; Skehan, 2021). The rationale for giving learners time to plan before performing the task is to mitigate pressure on the learners' limited cognitive resources and thus reduce the trade-off between different aspects of L2 production such as complexity and accuracy (Ellis et al., 2020; Skehan, 1996, 1998, 2021). Indeed, a great number of empirical studies have reported pre-task planning to have a positive impact on language production, especially on fluency and complexity (e.g., Foster & Skehan, 1996; Kim, 2013; Mochizuki & Ortega, 2008; Skehan & Foster, 1997; Tavakoli & Skehan, 2005; Yuan & Ellis, 2003). The results for its effects on accuracy, however, are mixed possibly because learners spend their planning time on organizing the content, rather than on language (Ellis et al., 2020). Studies have also found that providing guidance during planning, that is, to focus on form or content or both, can influence learners' production. Skehan and Foster (2001) argue that focusing on meaning during task performance may distract learners' attention away from attending to the linguistic code. Hence, some form-focusing strategies are necessary to attract

learners' attention to form in meaning-oriented task-based instruction. This can be achieved through either explicit or implicit form-focusing strategies. Explicit strategies overtly direct learners' attention to linguistic forms, such as through grammar instruction while implicit strategies attract learners' attention to forms indirectly by pre-task planning or modelling task performance (Kim, 2013).

The second phase of a task cycle is the during-task stage which focuses on completing the task. R. Ellis (2003, 2018) divided the methodological options that teachers can carry out in the during-task stage into two types, namely task performance options and process options. Task performance options involve decisions about how the teacher plans to undertake the task, for example, setting a time limit for completing the task (e.g., Skehan, 1996; Yuan & Ellis, 2003), providing access or no access to the input data during task performance (e.g., Joe, 1998; Shintani et al., 2016), and introducing a surprise element into the task (e.g., Foster & Skehan, 1997). Conversely, process options are concerned with how the teacher will manage the discourse arising from the task. The most widely examined process option is corrective feedback, which refers to the responses made to learners' errors or comprehension problems that arise during task performance. Although process options cannot be prescribed, teachers are advised to give some control of the discourse to the students to ensure that the language they produce is more student-centred and to encourage learners to function as "language users" (R. Ellis, 2003).

Moving on to the final phase of a task cycle is the post-task stage. Generally, activities that follow-up on the main task are conducted at this stage. The purpose of this stage is to present learning opportunities by: (1) having students repeat a task, (2) addressing problematic linguistic forms, or (3) encouraging learners to reflect on their task performance (Ellis et al., 2020). The benefits of task repetition have been widely investigated showing positive effects for both adult and child L2 learners, especially in terms of complexity and fluency in L2 oral

production (e.g., Bygate, 2001; Sun & Révész, 2021; Pinter, 2007). Task repetition allows learners to first try to express what they want to say and then pay greater attention to the selection of linguistic forms during their second performance (R. Ellis, 2003). Repeating a task in such a way can also encourage learners to use more formal register and more complex syntax. Another option available at the post-task stage involves techniques that can be used to explicitly address linguistic forms. The post-task stage is said to provide the most optimal condition to attend to form since it takes place after the task is finished and avoids disturbing the learners' focus on meaning (Skehan, 1998; Willis & Willis, 2007). Also, focusing on form in the post-task stage provides opportunities for learners to practise using the structures they found problematic or salient while performing the main task (Long, 2015; Skehan, 2021). Further, attending to linguistic forms after students have encountered problems can also motivate learners by allowing them to see the need to learn (Ellis et al., 2020). For teachers, the post-task stage enables them to use the input materials the learners worked with during the main task to give examples of how to use the target structures and to design different form-focused activities. Lastly, during the post-task stage learners can engage in reflection of their task performance or the task itself. For instance, learners can transcribe their performance and edit the transcript, or compare it with a model script.

As such, the post-task stage offers several beneficial options for language learning. Nevertheless, research focusing on post-task effects is relatively scarce compared to pre- and during-task effects, especially in terms of focus on form. In addition, most of the studies that have investigated how each stage impacts L2 performance have largely focused on speaking and only a handful of studies have examined L2 reading. Given that in foreign language contexts reading is usually the only readily available source of the target language input, more research on the role of reading tasks within the framework of TBLT is warranted. The following section will further discuss the theoretical and pedagogical rationales for broadening the scope

of TBLT research to L2 reading tasks. The differences between L1 and L2 reading will first be considered, then a cognitive processing model of L2 reading will be presented, followed by a discussion of previous research related to L2 reading.

2.2. Reading in a Foreign Language

Reading is a vital skill for readers of any age group and developing effective reading skills is especially important in this modern era dominated by information. Although L1 and L2 reading share similarities regarding cognitive processing strategies, there are considerable differences as well. Grabe (2009) lists several differences between L1 and L2 reading. One obvious difference is that L2 readers usually begin to read with less linguistic resources to support comprehension compared to L1 readers. Also, L2 reading can be supported or interfered by the linguistic resources and knowledge of the reader's L1. Grabe further states that L2 readers engage in various types of metalinguistic processing as they try to analyze the vocabulary and syntax to comprehend the L2 text. Another difference mentioned is the amount and type of texts L2 readers are exposed to. For example, in certain contexts it may be more common for L2 readers to practice reading short passages than reading longer texts as a source of information or simply for pleasure. Lastly, there can be differences in genre and the way texts are organized between L1 and L2 reading. L2 texts can be organized in unfamiliar ways and contain aspects that are culturally different which can make comprehension harder.

Among the various reading models proposed to explain the processes and components involved in L2 reading, Khalifa and Weir's (2009) cognitive processing model for reading comprehension provides an ideal theoretical foundation for the present thesis as it can rationalize the effects of tasks on L2 reading. In particular, the metacognitive component included in the model can reveal how post-task activities may influence reading

comprehension, since readers would react to reading differently depending on the goal of the task.

2.2.1. Cognitive Processing Model for Reading Comprehension

As can be seen in Figure 1, Khalifa and Weir's (2009) model has three main components-metacognitive activity, the central processing core, and the knowledge base- and each component contains various sub-processes. Metacognitive activity, in the left-hand column, involves setting goals, monitoring, and remediating where necessary. When setting goals, the reader determines which type of reading is required to complete a reading task. Depending on their goal, readers would either engage in careful or expeditious reading, which can also take place at either the local or global level. Local comprehension is strongly associated with linguistic knowledge such as word recognition, lexical access and building propositional meaning at the level of micro-structure, that is at the sentence and clause level. Global comprehension relates to understanding the text beyond the level of micro-structure and establishing macro-propositions including main ideas, and the connections between those macro-propositions and how micro-propositions expand upon them (Kintsch & van Dijk, 1978). The intention of careful reading is to understand all the information in a text to extract a complete meaning. Hoover and Tunmer (1993) differentiates careful reading from comprehension aimed at only extracting main ideas, skimming, or searching for details, and describes it as reading "intended to extract complete meanings from presented materials" (p. 8). As mentioned beforehand, careful reading can take place at a local or global level and involves slow, linear, incremental reading for comprehension (Khalifa & Weir, 2009). On the contrary, expeditious reading requires rapid, selective and efficient strategies to access specific information in a text such as skimming, search-reading or scanning. Skimming refers to reading for gist, general impressions and main idea of a text. Search reading involves

looking for specific information needed to answer certain questions or to gather data, for example to complete a writing assignment. Lastly, scanning is reading quickly to find specific information such as words, phrases, figures, names, or particular events in a text.

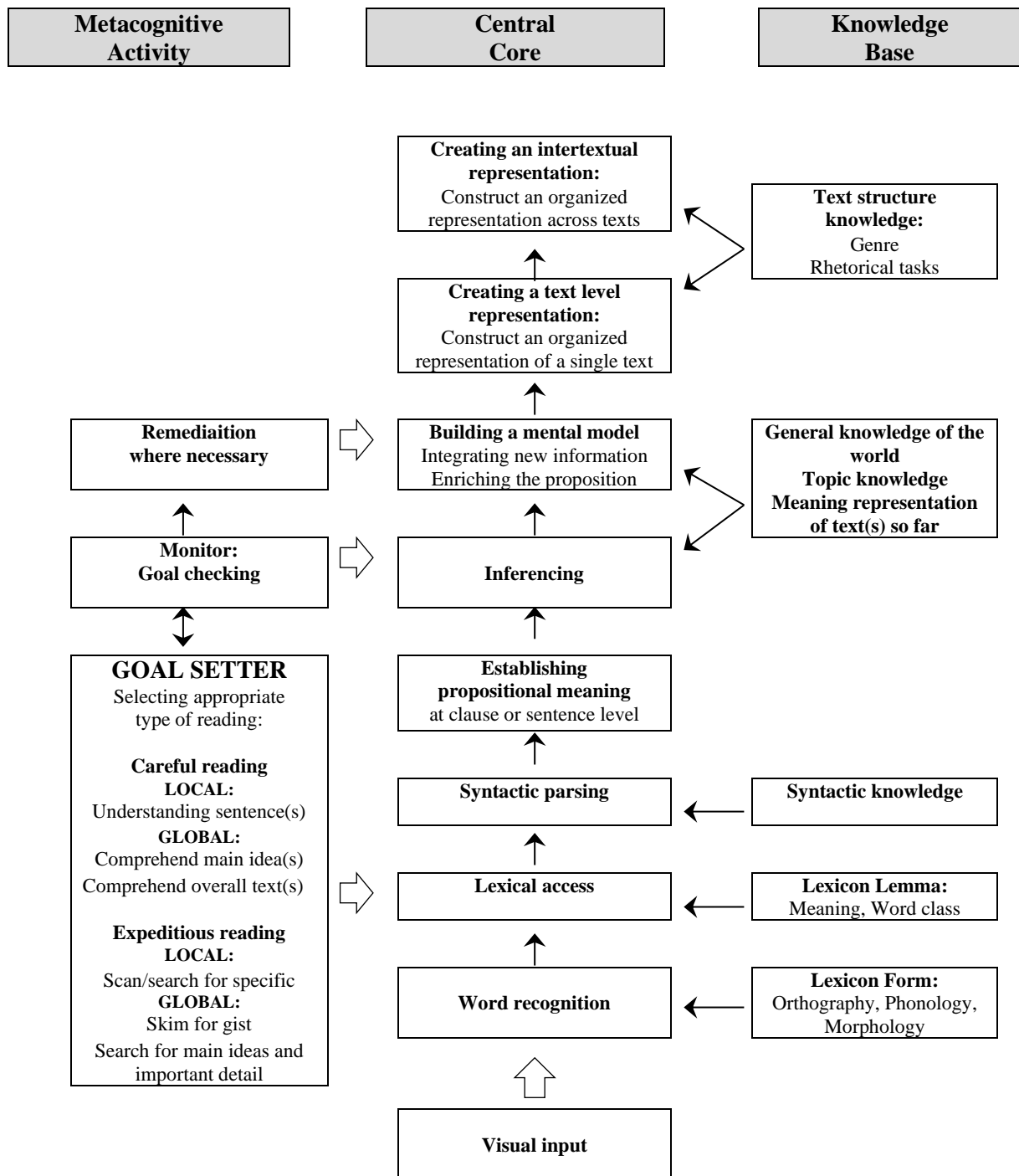


Figure 1. Cognitive Processing Model for Reading Comprehension

(Adopted from Khalifa & Weir, 2009, p. 43)

While engaging in reading, readers monitor whether their reading is advancing in accordance with the generated goals and rectifies reading behavior if necessary. Monitoring skills can pose difficulties on beginning readers. Whereas skilled readers can adopt monitoring strategies effectively to achieve comprehension, unskilled readers often fail to monitor comprehension or use appropriate strategies for self-monitoring. The goal-setter and monitoring components can also be seen as metacognitive mechanisms that enable readers to use different strategies and skills to deal with different reading purposes. These two components are also closely relevant to the present study which aims to examine task effects on L2 reading, since the purpose of reading and the level of strategies and skills required for reading would depend on the demands of the task.

Depending on the goal of reading, readers decide which type of reading to engage in and this decision affects the level(s) of processing involved in the central core of the model. The central processing core in the middle column of Figure 1 includes eight distinct cognitive processes that work together to achieve reading comprehension. These processes can be divided into two categories: lower and higher-level skills. The lower levels include word recognition, lexical access, syntactic parsing, and establishing propositional meaning and the higher levels include inferencing, building a mental model, and creating a text level representation or an intertextual representation. The lower-level skills can be much harder to develop for L2 readers but establishing automaticity in these skills can significantly improve reading comprehension by making available more attentional capacity in working memory (Grabe 2009; Khalifer & Weir, 2009). Word recognition is concerned with recognizing printed symbols, and their sounds. Field (2004) defines word recognition as “the perceptual process of identifying the letters and words in a text” (p. 234). Rapid and automatic word recognition is one of the main components that contribute to fluent reading comprehension (Grabe, 2009). According to Perfetti and Hart (2001), fluent word recognition requires

activating orthographic, phonological, and semantic and syntactic processes. In other words, the reader needs to recognize a word form automatically, activate links between orthographic and phonological information, activate relevant semantic and syntactic resources, identify morphological affixation in more complex words, and access their mental lexicon. For such reasons, most beginner level L2 readers are initially challenged by their inefficient and slow word recognition skills which in turn interferes with reading comprehension.

After readers access the meaning of words, they go through the process of syntactic parsing. This involves the readers grouping words into phrases and at the clause and sentence level in order to understand the content of the text (Khalifa & Weir, 2009). As word recognition and syntactic parsing take place, almost simultaneously the information from the clauses and sentences are used to build units of meaning to establish propositional meaning. Inferencing refers to filling in gaps in the explicitly stated ideas, or 'reading between the lines,' by having readers activate their own knowledge of the world or of the topic of the text. Once the reader has established links between ideas in the text through inferencing, individual propositions need to be combined into a mental model of the text as an overall meaning framework. The reader would then create a text level representation by recognizing the hierarchical structure of the entire text and distinguishing which parts of the information are essential to the meaning of the text, including main ideas and supporting details. Also, extracting information from multiple text sources would require additional processing to create an intertextual representation. Finally, as described by the knowledge base column in Figure 1, it is likely that the reader has various knowledge sources available while reading. These sources are connected to specific aspects of the central processing core. Those include orthographic, phonological, and morphological knowledge, lexical knowledge of the meaning and word class of words, syntactic knowledge, general world knowledge, knowledge about the topic of the text and knowledge of the text so far, and lastly text structure knowledge, that

is, knowledge of genre and rhetorical forms.

The cognitive processing approach to reading represented in Khalifa and Weir's model provides the following considerations for designing L2 reading tasks. First, the task purpose decides the level of cognitive processing in reading. In other words, it determines whether readers need to engage in careful or expeditious reading to find local or global information. Readers are expected to scan, skim, or search read expeditiously or read carefully depending on the perceived demands of a task. However, previous literature shows that unskilled readers face difficulty in making this judgement (e.g., Block 1986; Grabe, 2009; Koda, 2005). Also, if the reading task requires careful processing of a text, the task will pose greater cognitive demands on the reader in comparison to a task that requires less careful reading. Khalifa and Weir present the following list of types of reading from the easiest to the most difficult which can be taken into consideration when designing tasks:

1. Scanning/search reading for local information
2. Careful local reading
3. Skimming for gist
4. Careful global reading for comprehending main idea(s)
5. Search reading for global information
6. Careful global reading to comprehend a text
7. Careful global reading to comprehend texts

Further, Khalifa and Weir's model also draws on the importance of topic familiarity in that some topics are more demanding or interesting than others. Hence, the topic of a task can influence learners' reading and task performance. Next, if there is time constraint on completing a task it is more likely to be challenging for L2 readers than the same task being performed without a time limit. Finally, longer texts and sentences are more challenging in terms of both lower and higher-level processing.

2.2.2. Children Learning to Read in the L2

Although Khalifa and Weir's (2009) model helps identify factors that may influence L2

reading task performance, caution is needed when the model is applied to L2 children as it was proposed based on adult L2 readers. Unlike adults, L2 children are still developing their general cognitive and metacognitive capacities. The language, socio-cognitive behaviour, and emotional development of L2 children are not as well established as L2 adults (Simon, 2010). Further, L2 children are in the process of developing their L1 alongside their L2. Evidence from brain research also suggests that the sensory cortex is more plastic in early stages of life and this plasticity decreases with age, which has considerable effect on perception and language learning (Shibata et al., 2011). Such mutability of children can affect L2 reading performance differently from L2 adults. Hence, the age of the reader should be accounted for when applying Khalifa and Weir's model.

Although studies on L2 reading among young learners are not extensive, a number of studies have found metalinguistic awareness and strategies, phonological awareness, and vocabulary to influence young L2 readers' comprehension (e.g., Butler & Hakuta, 2006). In terms of metacognition, young children perceive the mind to be static and passive. For example, 5-year-olds believe they are capable of thinking about nothing, whereas 8-year-olds understand that this is impossible since the mind is always active (Flavell, 2000; Pinter, 2011). Children under the age of 6 find it difficult to recall what they were thinking even a minute ago, whereas children of school age start to gain better understanding of the capacities and functions of memory. Moreover, the ability to evaluate one's performance only starts to increase after the age of 11. Hence, the metacognitive activities outlined on the left-hand column of Khalifa and Weir's model (i.e., setting goals, planning, monitoring, and evaluating reading) may be more challenging for young L2 readers compared to L2 adults.

In addition, various skills outlined in the knowledge base (right-hand column) of the model will differ between L2 children and L2 adults. For example, Webb & Macalister (2019) reported on studies that found only 16% of secondary school EFL learners in Taiwan and 48%

in Denmark knew the most frequent 2000-word families even after nine years of instruction. Therefore, it is likely that children start reading in the L2 with far less vocabulary knowledge than adolescents and adults. Indeed, studies such as Garcia (1991) reported unknown vocabulary to hinder young learners' reading comprehension. Also, it has been suggested that, alongside L2 vocabulary knowledge, L1 vocabulary can contribute to the richness of the reader's conceptual network (e.g., Cummins, 1979). Major theoretical frameworks on cross-language transfer argue that L1 and L2 competencies are interrelated (e.g., Cummins, 1981; Koda, 2005, 2007). That is, children can utilize resources already acquired in the L1 to support development of new skills in the L2 (Genesse et al., 2006). Koda (2005, 2007) claims that such transfer is influenced by the degree of structural similarity between the L1 and L2. In this respect, children learning a foreign language that has a typologically different writing system from their L1 can find L2 reading more challenging and require more cognitive resources.

As such, the unique characteristics of L2 children, such as their cognitive and metacognitive development as well as general world knowledge may affect young L2 learners' reading performance differently from L2 adults. Factors like vocabulary size and cross-language transfer further differentiate the reading experiences of L2 children from those of adults. Hence, to gain a comprehensive understanding of L2 reading in children, it is essential to account for their age and distinct challenges they face. It is of significant concern that findings from adult studies are being applied to children and used to inform L2 instruction for young learners (Oliver & Azkarai, 2017). Although studies on L2 children are slowly growing, there remains much more research to be done among this population. Given the benefits of reading on L2 development, future research should, in particular, focus on expanding our knowledge of L2 reading among children to better inform pedagogical practices and support their reading development effectively.

2.2.3. Previous Research Examining Different Phases of a L2 Reading Lesson

As discussed in Khalifa and Weir's reading model, automatic word recognition and vocabulary knowledge are crucial for fluent reading comprehension. In this regard, L2 readers may face difficulty when reading a foreign text for the first time because it may contain unfamiliar vocabulary or language features. Further, researchers have reported that the lack of background knowledge or understanding of context can make comprehension difficult for L2 readers (e.g., Carrell, 1985; Johnson, 1981). For such reasons, reading lessons often include a pre-reading phase aimed to prepare learners for the main text. This stage generally involves activities related to pre-teaching useful language or activating relevant background knowledge about the text topic. The pre-reading phase can also be used to raise the interest of learners and provide a purpose for reading. Also, reading strategies typically used by skilled readers can be introduced at this phase (Grabe & Stoller, 2011).

Most studies that have investigated the effects of pre-reading activities have examined their impact on reading comprehension (e.g., Taglieber et al., 1988; Webb, 2009) and vocabulary (e.g., Alessi & Dwyer, 2008; File & Adams, 2010; Pellicer-Sánchez et al., 2022). Taglieber, Johnson and Yarbrough's (1988) study reports on a variety of pre-reading activities and their effects on reading comprehension. The pre-reading activities examined were pictorial context, vocabulary pre-teaching, and pre-questioning. Forty Brazilian EFL undergraduate students were divided into four groups of ten, with three groups engaging in their respective pre-reading activities and one group serving as the control group. The pictorial context activity involved showing three pictures from each reading, then having the participants discuss the pictures and make predictions about the story. For the vocabulary pre-teaching activity, eight words from each text were selected and taught to the participants. Lastly, the pre-questioning activity involved the researcher orally presenting a one-sentence summary of the text and asking the participants to formulate questions that the text might

answer. All the participants read the same four reading passages from different genres (i.e., a fairy tale, an article, and two fables) over the course of two days. Different genres were used in this study to ensure that any effects found for the pre-reading activities were not related to a particular passage characteristic. The results showed that all three pre-reading activities were beneficial in improving reading comprehension in comparison to the control group which received no pre-reading activity. Additionally, pre-questioning activity was found to be the most effective out of three activities, lending support to Nuttall's (1996) claim that prediction activities are beneficial and important in activating schemata to aid reading comprehension. In terms of engaging in pre-reading activities to improve L2 vocabulary, a study by Pellicer-Sánchez et al. (2022) provides convincing evidence that pre-teaching vocabulary can increase the salience and cognitive processing of target vocabulary. Using eye-tracking, the study examined the amount of attention allocated to pre-taught vocabulary items while controlling for frequency of occurrence. The results revealed that indeed the group that received pre-reading instruction paid significantly more attention to the taught items when initially encountered in the text compared to the group that received no instruction.

The second phase of a reading lesson, also known as the while-reading stage, “draws on the text, rather than the learner’s ideas previous to reading” (E. Williams, 1984, p.38). In other words, this stage is more about the interaction between the learner and the text. Here, while-reading activities aim at helping readers reach comprehension. Some examples are transferring information from a text to a chart, graph, or table, taking notes or summarizing. Most research related to the while-reading phase has examined ways to promote a focus on language through the reading text, such as employing input flood or textual enhancement, which will be discussed in more detail in Sections 2.3.2. and 2.3.4.

After the while-reading stage teachers can engage students in a post-reading phase. At

this stage, the focus slightly shifts away from the text and aims at helping readers reflect upon the reading and relate the text to their own knowledge, interest, or views (E. Williams, 1984). In addition, language-focused activities can be implemented at this stage. For example, Atay and Kurt (2006) investigated the effects of two types of post-reading activities on the vocabulary knowledge of 62 beginner level Grade 6 students in Turkey. The participants were divided into two groups, an experimental group and a control group. Before engaging in their respective post-reading activities, both groups received regular instruction from the teacher for two hours each session. This involved the participants reading a dialogue aloud, receiving explicit vocabulary and grammar instruction from the teacher, answering True or False comprehension questions, and completing vocabulary and grammar exercise worksheets. After the regular instruction, both groups were given an additional text to read, and each group engaged in different types of post-reading activities. The control group was asked to individually read a three to four paragraph long text that was thematically related to the dialogue given during the regular instruction. Then, the teacher went over the target words. Next, the participants completed discrete vocabulary exercises similar to the ones they did during the regular instruction. As for the experimental group, the participants were divided into groups of three or four and were given the same text as the control group except that the text was split among the group members. Each student was given one paragraph and a picture related to the paragraph. The teacher collected the texts after the students read them and gave each student a card with key words of the paragraph. Next, the students had to explain their picture using the key words to their group members. After this information exchange activity, the students wrote the story together. The results of the six-week study found that the experimental group outperformed the control group in acquiring both target and unselected vocabulary items.

Similarly, Yang et al. (2017) examined the effects of three different post-reading

activities on vocabulary acquisition among 85 advanced level university students in China. The participants were randomly assigned to four different groups with three groups engaging in different types of post-reading activities (i.e., sentence writing, gap-fill, and comprehension only) and one group serving as the control. All groups were given an authentic text from a newspaper with eight target words glossed in the margin. After reading the text, the participants answered five multiple-choice comprehension questions. As a post-reading activity, the sentence writing group wrote original sentences using the eight target words, the gap-fill group were asked to fill the blanks in a 230-word summary of the text using the target words, the comprehension only group wrote a 100-word essay about a topic related to the text, and the control group did not engage in any type of post-reading activity. The results of the four-week study revealed that the sentence writing group outperformed all the other groups, the gap-fill group outperformed the comprehension only and control group and the comprehension only group outperformed the control group. Additionally, the delayed post-tests showed that both the sentence-writing and gap-fill groups outperformed the comprehension only and control group, although there were no significant differences between the sentence writing and gap-fill group. The findings of the study lend support to the argument that post-reading word-focused activities are beneficial for vocabulary learning.

A few studies have also reported on the benefits of post-reading activities in developing grammatical knowledge. Izumi et al. (1999) set out to test whether output-based activities after reading could promote the noticing and acquisition of the past hypothetical conditional form in English. The study was conducted on 22 English as a second language (ESL) participants who were randomly assigned to an experimental group and control group. The treatment was divided into two phases with two activities in each phase, and a posttest followed each treatment phase. For Phase 1, the experimental group read a passage flooded with the past hypothetical conditional while underlining words and parts of words they felt

were important for the text reconstruction activity that was to follow. Then, they reconstructed the reading passage without looking at the original text. Next, the same reading passage was given to the participants, and they were told to read and underline words again. Afterwards, the participants were asked to reconstruct the text one more time. The same reading passage was given to the control group, and they followed the same procedure as the experiment group except that instead of doing the text reconstruction activity, they completed comprehension questions after the first and second reading of the text. During Phase 2, the experimental group wrote an essay on a topic that required the use of the target form. After completing the essay, the participants were given a model essay which contained the target form. The participants were told to read the essay and underline important words. Then they were told to write a second essay on the same topic. The control group wrote an essay that did not require the use of past hypothetical conditional but were given the same model essay as the experimental group to read. After, they completed comprehension questions. The results of the study revealed that both groups' noticing of the target form increased significantly, as measured by items underlined, indicating that reading activities that do not require output can also promote noticing of form. However, it was found that the experimental group incorporated the target form in the text reconstruction activity more often and the accuracy of using the forms increased from the first to the second writing. Also, the experimental group outperformed the control group in the posttest after Phase 2, but not Phase 1. The reason proposed for this outcome was that the heavy cognitive demands of remembering and reproducing the text posed by the writing activity led participants to store the target form in short-term memory and then lose it straight after reproduction. Hence, the study suggested that having learners engage in activities that do not place too much cognitive demand would be more beneficial in acquiring grammatical forms.

Inspired by Izumi's study, Yoshimura (2006) examined whether manipulating

foreknowledge of an output-based activity would have any effect in reading behavior, reading comprehension, and noticing of language form. The participants were 57 intermediate level Japanese university students, who were assigned to three different groups. Each group received different directions on what to do after reading. Group 1 was instructed to read the text and to reproduce the English text afterwards (i.e., reading for memorization). Group 2 received instructions to read and retell the content of the text in English (i.e., reading for retelling). Lastly, Group 3 was asked to read and draw a picture based on the passage (i.e., reading for visualization). After reading, all the participants were given a post-reading activity different from the ones that they were informed of. The real task was to describe what they had done during the treatment (i.e., self-report), complete comprehension questions, and to do a gap-fill exercise based on the text they had just read. The results showed that directions to read for memorization and for retelling induced different reading behaviors and noticing of form. Both groups tried to translate the information into their L1, suggesting that the participants in these two groups were preparing themselves for the output activities to come. The group that had to reproduce the text seemed to have monitored their learning and noticed the target form more than the retelling group. Meanwhile, the reading for retelling group paid more attention to content or focused on trying to express their ideas in English. Further, the scores on the verb production test suggested that giving directions to read for memorization is more effective in acquiring verbs than reading for visualization. However, comprehension scores across all groups were not significantly different. Yoshimura concluded that foreknowledge of an output activity alone can result in more attention toward linguistic form in the input. The findings provide us with useful implications for encouraging noticing of language form during L2 reading without interrupting text comprehension.

In sum, there seems to be some supporting evidence that engaging learners in various activities at each phase of a reading lesson can facilitate reading comprehension, vocabulary

learning, and grammatical development. However, although some of the previous studies discussed above have used the term ‘task,’ most of them employed activities that can be described as traditional ‘exercises’ rather than a ‘task’ defined in TBLT (i.e., a primary focus on meaning, the involvement of cognitive processes by learners, the use of language similar to real world communication, and the presence of non-linguistic outcomes; See also Section 2.1.2.). Among the little literature on L2 reading tasks within the framework of TBLT, only Shintani (2016) mentions a while-reading task designed for junior-high school students in Japan. She had individual students first read a text about two girls. Then she asked them to complete an information-transfer task by completing a table which had several questions asking for specific information from the text so that the outcome would be a summary of the stories. Afterwards, the students were told to discuss in small groups which girl they would invite to study at their school and to provide reasons for their choice. However, this was more of an illustration of the task rather than an empirical study. Hence, to date, little has been researched about how developing grammatical knowledge through L2 reading can be assisted by incorporating a post-reading task within a task-based lesson: a gap the present thesis seeks to provide further insight into. In order to provide theoretical and empirical support for using post-reading tasks to promote L2 learning, the following section will discuss current understandings on how to best achieve L2 comprehension and acquisition through reading.

2.3. L2 Learning through L2 Reading

L2 reading has been reported to facilitate, besides the development of reading skills, the learning of various target language features including L2 vocabulary and grammar (e.g., Grabe & Stoller, 2011; Hafiz & Tudor, 1990; Krashen, 2004; Lee et al., 2015; Mermelstein, 2015; Pellicer-Sánchez, 2016, 2017; Webb & Chang, 2015). Additionally, an increasing body of L2 research informs us that L2 reading and general L2 proficiency are closely related. That

is, having greater vocabulary and grammatical knowledge facilitates effective text processing for L2 reading comprehension, and better reading comprehension can lead to further development in L2 proficiency. In this respect, L2 reading research and pedagogic intervention should aim to find effective ways to teach both reading and L2 competence.

Following the communicative approach, L2 reading instruction has largely focused on comprehension emphasizing development in reading rate, reading skills, and reading strategies. However, taking such an exclusively meaning-based approach to reading instruction has been criticized for giving learners little opportunity to process reading materials for grammar (Han & D' Angelo, 2009). Celce-Murcia (2002) states that "languages take place in context and at the level of discourse rather than the abstract sentence level" (p.119), hence why grammar should be taught within context. Reading can provide models of how to use the language at the phrase, clause, and sentence level, from which learners can derive grammar rules. Therefore, it is equally important to train learners to process texts to build an understanding of how meaning is encoded linguistically, besides processing texts for comprehension. Another concern with exclusively meaning-based L2 reading instruction is that it mainly encourages learners to use top-down processing strategies relying on non-linguistic (e.g., background knowledge, contextual clues) as opposed to linguistic resources when processing texts. Although this may aid general understanding of texts, it has minimal benefits for learners in developing grammatical or lexical knowledge. In order to foster a more balanced development in L2 ability, Han and D'Angelo (2009) suggest that L2 reading instruction should promote reading for communicative and acquisitional purposes.

There have been differing views on how comprehension and acquisition can both be achieved through L2 reading. Krashen asserts in his Input Hypothesis that acquisition can occur naturally through sufficient exposure to comprehensible input. This claim, however, has been heavily criticized based on a substantial number of studies showing that acquisition

does not always follow as a byproduct of comprehension (e.g., Gass & Selinker, 2001; Long, 1996; VanPatten, 1996). For example, VanPatten (1990, 1996) posits that L2 learners process input for meaning before processing it for form. In his information processing model, he suggests that learners (a) process content words in the input before others, (b) tend to process lexical items rather than grammatical items for semantic information, and (c) process more meaningful morphology before less or non-meaningful morphology. Also, VanPatten claims that learners can only process form that is not meaningful if comprehension as a skill is automatized. That is, only if the learner's attentional resources are freed up from allocating attention to meaning can they attend to language forms. Accordingly, learners will not utilize all the input that they are exposed to in restructuring their interlanguage. This is particularly true for linguistic forms that have low communicative value and/or physical salience (N. Ellis, 2006; Goldschneider & DeKeyser, 2001; VanPatten, 1990, 1996). In such cases, there is a consensus that an external intervention is needed to capture learners' attention, which is generally considered to be a prerequisite for L2 acquisition (Robinson, 2003; Schmidt, 2001). Several researchers have proposed that this may be achieved via employing textual modification techniques, such as input enhancement. The common rationale underlying these techniques is that it is crucial to direct learner attention to linguistic features in contexts where learners' primary attention remains dedicated to meaning (Long & Robinson, 1998). The next section will present three key proposals for the role of attention and awareness in SLA, which provide theoretical foundations for the use of textual modification techniques to foster L2 development through reading.

2.3.1. Attention and Awareness in SLA

It is generally accepted in the field of SLA and cognitive psychology that attention is necessary for learning to take place (e.g., Schmidt, 1990, 1995, 2001; Robinson, 2003).

Notably, the construct is especially emphasized in cognitivist accounts based on extensive and empirically supported claims that attention to stimuli is necessary for long-term memory storage and that without attention, little, if any, learning will take place (e.g., Carlson & Dulany, 1985; Carr & Curran, 1994; Posner, 1992). Despite this general agreement on the facilitative role of attention in L2 development, there has been much debate surrounding the role of awareness.

Tomlin and Villa (1994), for example, assert that conscious awareness is not a critical component of attention in SLA. They propose three subsystems of attention: (a) alertness (the learners' motivation, interest towards the target language, and classroom readiness to learn), (b) orientation (the direction of attentional resources to specific sensory information), and (c) detection (the cognitive registration of sensory stimuli). According to Tomlin and Villa, only detection is the attentional function required for acquisition, and that the process of detection does not require awareness. That is, learning is possible without awareness. Further, they contend that although awareness plays a facilitative role by setting up the circumstances for detection, it does not lead to detection directly.

Contrary to Tomlin and Villa's view that awareness is not essential for learning, the most commonly accepted view in SLA is that input cannot be processed in short-term memory without awareness, and thus it cannot be processed deeper for learning to occur. In his *Noticing Hypothesis*, Schmidt (1990, 1995, 2001) argues that attention controls access to awareness, and is responsible for noticing. He defines noticing as attention involving a certain level of awareness, and this is a necessary condition for input to convert into intake. Schmidt (2001) agrees with Tomlin and Villa's view in that detection is required for input to become intake. However, he argues that only what is detected and consciously registered will be available for further processing and possibly lead to learning. Thus, he rejects the notion that learning without awareness is possible. Schmidt also proposes that there is a higher level

of awareness than noticing referred to as awareness at the level of understanding, which includes knowledge about abstract rules or metalinguistic awareness. Schmidt initially claimed that noticing was necessary for second language learning, whereas understanding was facilitative but not essential. However, he later put forward a weaker version of the hypothesis and adjusted the role of noticing as a facilitator, rather than a prerequisite for L2 development.

Robinson (1995) supports Schmidt's position that detection without awareness is insufficient to trigger noticing and for learning to take place. At the same time, he agrees with Tomlin and Villa in that detection is necessary for encoding in short-term memory and that learning begins with detection. Along with the construct of attention, Robinson includes the role of memory in the initial stages of the L2 learning process. He defines noticing as "detection with awareness and rehearsal in short-term memory, prior to encoding in long-term memory" (1995, p.298). The term rehearsal in this definition refers to two types of processing strategies: data-driven processing and conceptually-driven processing. The former involves rehearsal and maintenance in memory of instances and chunks in unanalysed form. The latter also known as schema-based processing requires activation of schemas in long-term memory which involves more elaborate rehearsing and analysing of input. Through these rehearsal mechanisms, information is sent to long-term memory from short-term memory and result in noticing and higher levels of awareness. (Robinson, 2003).

In a more recent account of attention, Chun et al. (2011) propose a multiple system of attention consisting of an internal and external system. Internal attention is concerned with selecting and modulating information that is internally generated, whereas external or perceptual attention selects and modulates sensory information that can be created by external cues (e.g., manipulating visual stimulus). The internal and external systems are presumed to be distinct, but the two interact, with working memory serving as the interface (LaBrozzi &

Villegas, 2020). For instance, internal attention subsumes cognitive control and executive functions, which, in turn, drive the selection of perceptual input that gets encoded and rehearsed in working memory.

As can be seen from the different models of attention, the role of awareness in L2 development is controversial. While Schmidt and Robinson posit that awareness is essential for input to be converted into intake, Tomlin and Villa do not. Nevertheless, there is general agreement that attention plays a central role in SLA. With this shared understanding, researchers have begun to investigate the potential of various types of instructional interventions in enhancing learners' attention to L2 linguistic features, especially those with low perceptual salience. Much of this research has been inspired by Long's focus on form proposal, which we now turn to in the next section.

2.3.2. Focus on Form

Focus on Form (FonF) is considered a central construct of TBLT and Long describes it as a core methodological principle of TBLT. Skehan (1996) also emphasizes that for task-based approaches to be feasible and effective it is necessary to “devise methods of focusing on form without losing the values of tasks as realistic communicative motivators, and as opportunities to trigger acquisitional processes” (p. 42). FonF is also different from traditional grammar teaching as it is integrated into communication-centred instruction. As defined by Long (2015) focus on form is:

reactive use of a wide variety of pedagogic procedures to draw learners' attention to linguistic problems in context, as they arise during communication, thereby increasing the likelihood that attention to code features will be synchronized with the learner's internal syllabus, developmental stage, and processing ability (p. 27).

There are two key characteristics underlying this definition: (a) Attention to form occurs within a larger meaning-focused context, and (b) attention to form takes place in reaction to noticeable learner errors. Doughty and Williams (1998), however, argue that reactive FonF may be difficult in practice especially for mixed level classes or with learners from different L1 backgrounds. It would also require teachers to have the capacity to notice whether intervention is needed and to instantly develop FonF interventions for learner errors. Thus, Doughty and Williams adopt a broader definition of FonF by including planned lessons directed at teaching preselected linguistic items, provided that those items are taught within primarily meaningful activities (Ellis et al., 2001). This broader definition was adopted for the present thesis.

There are various techniques that can be used to implement FonF. Doughty and Williams (1998) provide a continuum of FonF techniques that vary in terms of the extent they interrupt the flow of communication. At the implicit end, there are techniques that are less obtrusive such as input flood, input enhancement, and recasting. The aim of these techniques is to implicitly attract the learners' attention to form and encourage the processing of them without providing explicit guidance so that the processing of meaning is not interrupted. Contrarily, at the explicit end lie more obtrusive and rule-based techniques such as dictogloss tasks, consciousness-raising tasks, and input-processing instruction. These techniques draw the learners' attention to form more explicitly and direct learners to reflect, discuss, or process linguistic form in specific ways. Hence, they are more likely to interfere with the flow of communication.

When referring to this implicit/explicit continuum, Doughty and Williams state that one should not adopt a rigid stance on having to make all pedagogical choices based on whether the learning experience is entirely an implicit process or an explicitly 'taught' process. This is because second language acquisition cannot be purely incidental and effortless or be achieved

exclusively by teaching rules explicitly. Hence, there is a place for both implicit and explicit FonF and sometimes the techniques can be used in combination with one another. The following sections will consider two main pedagogical approaches: explicit instruction which lies at the explicit end of the FonF continuum and textual enhancement, an implicit focus on form, which are both the focus of the present thesis.

2.3.3. Explicit Instruction

Explicit grammar instruction has been widely used in L2 instruction, although isolated grammar instruction has received much criticism since the emergence of communicative language teaching practice (Doughty & Williams, 1998). Here we refer to explicit grammar instruction as “the use of instructional strategies to draw the students’ attention to, or focus on, form and/or structure” (Terrell, 1991, p. 53). The aim of explicit instruction in this thesis is seen as to increase the salience of frequently ignored L2 features by, first, asking learners to pay attention to them and explaining their structure, then by providing meaningful input that exposes the learners to abundant exemplars of the grammatical meaning-form relationship (Cintrón- Valentín & N. Ellis, 2015). Studies have found an advantage for this type of instruction, reporting that pedagogical conditions involving explicit focus on rules underlying L2 linguistic structures are more effective than those that do not incorporate such a focus (Norris & Ortega, 2000; Spada & Tomita, 2010).

In TLBT literature, however, providing explicit grammar instruction has been controversial due to the possibility that it may detract learners’ focus on meaning. For example, Long (2015) strongly argues against pre-task grammar instruction on the grounds that learners may not be developmentally ready for the preselected linguistic forms. Others warn that explicit grammar explanation can cause learners to treat a task like an exercise that requires them to ‘practice’ rather than ‘use’ language, thus violating the meaning-primary principle of

task-based teaching (R. Ellis, 2003; Willis & Willis, 2007). Conversely, proponents of explicit grammar instruction claim that it is necessary to teach learners grammar before performing a task as declarative knowledge is a pre-requisite for proceduralization and automatization to occur (DeKeyser, 1998, 2015), and that teachers also prefer to do so especially in contexts where the L2 is a foreign language (Littlewood, 2007; Van de Guchte et al., 2019).

As a way to ensure that the target feature is used by learners while performing focused tasks, a number of studies have suggested providing explicit instruction prior to task performance. For example, Samuda (2001) examined learners carrying out a task designed to create a semantic space for the use of modal auxiliaries to express possibility and probability. The task required participants to guess the identity of a person based on what they have in their pockets. The participants were not given any feedback in the beginning, but during the next stage of the lesson the teacher implicitly drew the participants' focus to the target forms. However, the study found that this did not result in learners using the target modal verbs. It was only after the teacher offered an explicit metalinguistic explanation about the target construction that the participants started to employ it in performing the task. Among the handful of studies that have made direct comparisons between performing a focused task with and without explicit instruction, Mochizuki and Ortega (2008)'s study provides valuable insights. The study investigated 56 EFL high school students in Japan completing an oral story-retelling task under one of three conditions: no planning, 5 minutes of unguided planning, and 5 minutes of planning with grammatical guidance about English relative clauses. The task was also designed to make relative clauses useful for completing the task. The students' performance on the task was analysed in terms of amount and quality of use of relativization. The findings showed that the guided planning group produced significantly more relative clauses in their oral narratives compared to the other two groups, and more target-like use of relative clauses. The study concluded that planning time alone may not necessarily guarantee accurate

production of the target form and explicit attention to form may be useful in ensuring that a task fulfils its intended linguistic focus.

There are a few studies that have examined the effects of teaching grammar in the pre-task stage on the complexity, accuracy, and fluency of L2 oral production (Ellis et al., 2019; Mochizuki & Ortega, 2008; Sadeghi & Pourhaji, 2021). For example, Ellis et al. (2019) found explicit pre-task explanation to have detrimental effects on task performance. Their study examined 72 eighth grade EFL learners under two conditions. One group received a short grammar lesson on the English passive voice along with 5 minutes of practice before performing a dictogloss task whereas the other group completed the same task without any instruction or practice. The findings showed that providing pre-task instruction resulted in more frequent use of the target structure but had harmful effects on the complexity, accuracy, and fluency of the participants' production. Contrarily, Sadeghi and Pourhaji (2021) found that providing explicit instruction to 103 low-proficiency EFL learners before performing a focused story-retelling task had a positive effect on improving English relative clauses in terms of accuracy and global complexity. However, pre-task explicit instruction was found to have a negative impact on fluency. As such, research has reported mixed findings. This could be due to differences in the way explicit instruction was provided, for example through a simple grammar handout (e.g., Mochizuki & Ortega, 2008; Sadeghi & Pourhaji, 2021) or a teacher-led grammar lesson (e.g., Ellis et al., 2019). Among the little research that has examined the effectiveness of explicit instruction on task performance, Shintani et al. (2016) directly compared the effects of pre- and post-task metalinguistic explanation on second language writing. Their findings suggest that while providing metalinguistic explanation before and after the main task can improve the learners' accuracy in writing, pre-task explicit instruction has more long-lasting effects. Given the scarcity of research in this area and the importance of focus on form in TBLT (Ellis et al., 2020; Long, 2016), it would be worthwhile for more studies

to investigate the ideal timing of attending to linguistic forms in a task-based lesson, which is an aspect the present thesis aims to focus on.

Although explicit instruction may have its benefits, it has been argued that it is likely to have more immediate effects and less probable to result in long-term retention. Implicit strategies, on the other hand, are assumed to have more durable effects although repeated exposure may be needed to see measurable gains (Long, 2007, 2015; Mackey & Goo, 2007). Further, research suggests that implicit types of FonF are more suitable for children as they tend to rely primarily on implicit learning mechanisms (Roehr-Brackin & Tellier, 2019). The use of FonF techniques is also considered beneficial and oftentimes essential for sustainable and accurate child SLA (Oliver et al., 2017). This holds particularly true for children in foreign language classroom contexts where, due to limited access to L2 input, it is more challenging for children to reach high levels of L2 proficiency (Spada & Lightbown, 2008).

Among the more implicit types of FonF techniques, input enhancement has been widely investigated in SLA research. Input enhancement is based on the premise that making linguistic features perceptually salient can increase the possibility that learners devote attention to and subsequently acquire the enhanced linguistic constructions (Robinson, 2003; Schmidt, 2001; Sharwood Smith, 1993). There are several techniques that can be used to enhance input, such as textual enhancement and input flood. Also, for oral input, using specific stress, intonation, or gestures can increase the saliency of target forms. One type of input enhancement technique that has received much attention in the context of reading is textual enhancement. Now we turn to a description of textual enhancement and a discussion of empirical research investigating its effectiveness in facilitating L2 development.

2.3.4. Textual Enhancement

Textual enhancement (TE) is an implicit, unobtrusive FonF technique that makes input perceptually salient to L2 learners through various enhancement techniques such as **boldfacing**, underlining, *italicizing*, CAPITALIZING, color-coding, or using different fonts. The theoretical rationale underlying textual enhancement stems from Sharwood Smith's (1991, 1993) input enhancement hypothesis. According to this proposal, making linguistic features salient through techniques such as written (e.g., underlining) or oral (e.g., pausing) textual enhancement can raise the probability that learners allocate attention to and subsequently acquire the enhanced linguistic constructions (Robinson, 2003; Schmidt, 2001). Sharwood Smith (1991) also distinguished between internally- and externally-created salience, the former arising during natural learning processes and the latter resulting from deliberate modifications of the input (e.g., via textual enhancement). Notably, however, externally-created salience does not always coincide with internal salience, which Sharwood Smith regards as necessary for L2 development. In other words, textual enhancement is only expected to be effective when externally enhancing linguistic constructions help develop internal salience within learners.

Sharwood Smith's distinction between internal and external salience chimes well with Chun et al.'s (2011) conceptualization of attention as a multiple system. Similar to Sharwood Smith's proposal, Chun et al.'s attentional account implies that while textual modifications may attract learners' external attention (Issa & Morgan-Short, 2019), the enhanced constructions will only be encoded and maintained in working memory if they also capture learners' internal attention. In case internal attention becomes engaged and a memory trace gets created as a result of encoding in working memory, then the new trace needs to be strengthened through repeated retrieval for long-term retention to take place. An increasing number of L2 studies suggest that exposing learners to the targeted construction in a

distributed fashion, in briefer sessions over multiple occasions, appears particularly beneficial (Rogers, 2015). That is, textual enhancement is unlikely to lead to development unless learners are exposed to the enhanced constructions multiple times over a longer period.

2.3.5. Previous Empirical Research on Textual Enhancement

Previous research findings on textual enhancement are aligned with these theoretical insights. A meta-analysis by Lee and Huang (2008) found that textual enhancement had a small positive impact on L2 grammatical development. The few studies that were conducted with children also reported some benefits of textual enhancement for grammar learning (e.g., Meguro, 2019; Révész et al., 2021; White, 1998). Overall, however, existing results are fairly mixed with some studies showing positive effects (e.g., Alsadoon & Heift, 2015; Doughty, 1991; Jourdenais et al., 1995; S. Lee, 2007; Révész et al., 2021; Shook, 1994), while others reporting minimal or no effects of TE on grammar learning (e.g., Lee & Jung, 2021; Leow, 1997, 2001; Leow et al., 2003; Loewen & Inceoglu, 2016; Lyddon, 2011; Winke, 2013; Wong, 2003). A summary of previous studies on textual enhancement and their results are presented in Table 1. Null findings have been accounted by a number of factors, including absence of sufficient prior knowledge of the targeted construction (Park, 2004; Winke, 2013), learners' perception that enhancement is irrelevant to task completion (Indrarathne & Kormos, 2017), low level of motivation on the part of learners (Winke, 2013), number and choice of typographical cues (Simard, 2009), the application of non-conflated or simple enhancement (i.e., textual enhancement is the single technique used) as opposed to conflated or compound enhancement (i.e., using enhancement together with other pedagogical techniques) (Han et al., 2008; Leow, 2009), and lack of overlap between internally- and externally-created salience (Indrarathne & Kormos, 2017).

Null findings, as mentioned earlier, might also have been due to insufficient frequency of exposure to the targeted feature. For textual enhancement to have a positive effect on L2 development, learners would probably need to encounter the enhanced linguistic construction on multiple occasions over an extended period. This is especially so given that textual enhancement, being an implicit focus-on-form technique, is anticipated to require a longer period to yield gains. More explicit instructional interventions are likely to have more immediate effects, albeit they are less probable to result in long-term retention (Long, 2007, 2015; Mackey & Goo 2007). Despite these insights, the bulk of research on textual enhancement has adopted single-treatment designs. There are a small number of studies which included multiple treatments, but they typically had only a few sessions (e.g., Indrarathne & Kormos, 2017, 2018; Meguro, 2019).

One exception is Doughty's (1991) seminal work, where learners took part in ten treatment sessions involving compound enhancement to examine its effects on developing knowledge of English relativization. In her study, 20 participants were randomly assigned to three groups: the meaning-oriented textual enhancement group (MOG), the rule-oriented enhancement group (ROG), and the control group (COG). All groups engaged in a series of reading lessons over a 10-day period completing one lesson per day. Specifically, the participants had to skim through the text first, then read for understanding, scan the text for specific information and answer questions, then finally write a summary of the passage in their first language (L1). Only during the reading for understanding stage did the three groups differ in treatment. The MOG was given the reading passage first with lexical and semantic explanation and then with the target form textual enhanced, the ROG received the same textually enhanced reading passage along with presentations of explicit rules of the target form, and the COG was asked to read the same reading passage with no enhancement. The results from the post-tests revealed that the MOG and ROG improved similarly in acquiring

the target feature, but the MOG outperformed both ROG and COG in comprehension. One of the factors that contributed to the positive effects of textual enhancement may have been exposing the participants to textual enhancement through ten treatment sessions. Further research, however, is needed to ascertain whether these findings can be transferred to different populations, contexts, and target constructions.

It is important to note that in Doughty's study, the groups that involved textual enhancement also received some sort of explicit presentation of language form. Some researchers (e.g., Indrarathne & Kormos, 2017; Leow et al., 2019; Leow & Martin, 2017) have suggested that using textual enhancement in conjunction with other instructional techniques may yield more favourable results. Indrarathne and Kormos (2017) claim that if the learners are not sufficiently prepared for what to pay attention to in the input, they may fail to direct their attentional processes to the target forms even if they are visually enhanced. Hence, textual enhancement may be more effective when accompanied with explicit instruction. However, R. Ellis (2003) cautioned, as previously mentioned, that pre-teaching target features before a task may cause the learners to 'practise' rather than 'use' the target structure, thus violating the 'meaning-primary' principle of a task. Further, some studies have shown pre-task explicit instruction to have a negative impact on overall task performance (e.g., Ellis et al., 2019; Van de Guchte et al., 2019). Against this background, one goal of this study was to examine whether the presence or absence of explicit teaching of target form influences the effects of textual enhancement in developing L2 grammatical knowledge.

More recently, Révész et al. (2021) directly investigated the effects of multiple-exposure textual enhancement. Their study is particularly relevant to the present thesis as it examined the effects of textual enhancement among child EFL learners. The participants were 91 Romanian and Swedish children aged between 10-12 years old. The target feature examined was the English noun derivational suffixes *-ion* and *-ment*. The Swedish and

Romanian participants were analysed separately due to differences in reading proficiency and knowledge of the suffix *-ion*. In each context (Swedish vs Romanian), participants were randomly assigned to either the +highlight or the -highlight group. The participants engaged in six treatment sessions, during which the highlight group read textually enhanced texts and the – highlight group read unenhanced texts. The results of the study found a small positive effect of textual enhancement for the Swedish learners, but only in acquiring the *-ion* morpheme. However, no benefits of highlighting were found for the Romanian learners. More importantly, reading comprehension was not compromised by the presence or absence of textual enhancement. As a possible explanation for the limited results found, the authors suggested that the length of treatment may not have been sufficiently long enough (total of 3 hours). Also, since the target forms were non-salient features, the authors speculated that a more explicit instructional intervention could have led learners to process the forms more deeply. Nonetheless, given the positive results found, albeit small, it would be worthwhile for future studies to explore whether providing longer treatment sessions does indeed lead to greater learning.

Table 1. Summary of Studies on Textual Enhancement

Study	Target form(s)	Duration of Treatment	Participants	Results
Doughty (1991)	English relative clauses	Ten sessions	20 adult intermediate-level ESL learners from diverse L1 background	Positive effects on acquisition
Shook (1994)	Spanish present perfect/ relative pronouns	Two sessions, less than 1 hr each	125 undergraduates	Positive effects on acquisition
Alanen (1995)	Finnish locative suffixes/ consonant gradation	Two sessions, 15 mins each	36 adult learners with L1 English	Positive effects on acquisition

Jourdenais et al. (1995)	Spanish preterit/imperfect	One session, less than 1 hr	10 adult learners with L1 English	Positive effects on noticing/intake
Leow (1997)	Spanish formal imperatives	One session, less than 1 hr	84 adult learners with L1 English	No effects on acquisition
Jourdenais (1998)	Spanish preterit/imperfect	Three sessions, 30-45 mins each	116 adult learners with L1 English from different proficiency levels	No effects on acquisition
Overstreet (1998)	Spanish preterit/imperfect	One session, less than 1 hr	50 adult learners with L1 English	No effects on acquisition
White (1998)	English possessive determiners	Six sessions, 10 hrs in total	86 sixth-grade ESL learners with L1 French	Partial effects on acquisition
Leow (2001)	Spanish imperatives	One session, less than 1 hr	38 adult learners with L1 English	No effects on noticing/intake
Izumi (2002)	English relativization	Six sessions, 30-60 mins each	61 adult ESL learners from diverse L1 backgrounds	Positive effects on noticing (note-taking and text reconstruction task), but no effects on acquisition
Overstreet (2002)	Spanish present progressive/imperfect subjunctive	One session, less than 1 hr	109 adult learners with L1 English	No effects on intake but better recognition of items with higher communicative value
Leow et al. (2003)	Spanish present perfect/present subjunctive	One session, less than 1 hr	72 undergraduates	No effects on noticing/intake
Wong (2003)	French past participle agreement in relative clauses	Three sessions, less than 1 hr	81 adult learners with L1 English	No effects on acquisition
Park (2004)	English reporting past events (verb-backshifting)	Two sessions, 35 minutes each one	24 ESL learners from diverse L1 backgrounds	Partial effects on noticing/acquisition

Lee (2007)	English passive	Four sessions, 50 minutes each one	259 grade 11 EFL learners with L1 Korean	Positive effects on acquisition, but unfavourable effects on comprehension
Alsadoon & Heift, (2015)	English vowels	One session, less than 1 hr	30 ESL learners with L1 Arabic	Positive effects on noticing and reducing vowel blindness
Lyddon (2011)	French á/au/en/aux	One session less than 1 hr	136 undergraduates with L1 English	No effects on acquisition
Winke (2013)	English passive	One session Less than 1 hr	55 adult ESL learners from diverse L1 backgrounds	Positive effects on noticing, but no effects on acquisition
Jahan & Kormos (2015)	English future tense (will/be going to)	Two sessions, less than 1 hr	97 undergraduates with L1 Bangladesh	Positive effects on noticing, no effects on acquisition and comprehension
LaBrozzi (2016)	Spanish preterit tense of <i>-er</i>	One session, 10 minutes	125 adult learners with L1 English	Positive effects on form recognition, no effects on comprehension
Indrarathne & Kormos (2017)	Causative <i>had</i>	Three sessions Less than 1 hr	100 undergraduates with L1 Sinhala	No effects on noticing
Loewen & Inceoglu (2016)	Spanish preterit, Imperfect	One session, 15 minutes	37 adult learners with L1 English	No effects on noticing/ acquisition
Meguro (2019)	English tag questions	Three sessions	69 grade 11 students with L1 Japanese	Partial effects on acquisition
Révész et al. (2021)	English noun derivational suffixes (-ion/-ment)	Six treatment sessions, 3 hrs	91 child EFL learners with L1 Romanian and Swedish	Partial effects on acquisition only for L1 Swedish learners
Lee & Jung (2021)	English participle phrases	One session	73 Korean university students	Positive effects on noticing, but no effects on acquisition

2.3.6. The Post-Task Stage as a Platform for Focus on Form

Besides providing multiple exposure, another way to enhance the effects of textual enhancement might be to integrate it in the post-task rather than the during-task stage of a task-based lesson. Han et al. (2008) argued that one of the reasons why many textual enhancement studies did not succeed in developing learners' knowledge of the targeted forms might be that researchers attempted to direct participants' attention to meaning and form simultaneously (e.g., instructing learners to read textually enhanced texts for meaning) instead of engaging them first in processing for meaning followed by opportunities to focus on form (e.g., reading an unenhanced text first for meaning, followed by exposure to an enhanced version to prompt attention to form). The researchers derived this argument from information processing accounts (Skehan, 1996, 2009; VanPatten, 1996), which propose that simultaneous processing of two types of information is only possible if the processing of one of them is automatized. Otherwise, trade-off effects are expected, with one or both types of information remaining insufficiently processed. Indeed, the few textual enhancement studies that designed conditions for sequential instead of simultaneous processing generated more positive results (e.g., Doughty, 2001; Izumi, 2002).

Applying this idea to task-based reading lessons, it would appear that learners might benefit more from being exposed to textual enhancement in the post-task rather than the during-task stage. In the during-task stage, learners would be able to dedicate their full attention to the content of texts, thereby avoiding the possibility that a focus on meaning is compromised. Then, in the post-task stage, once they have had the opportunity to clarify the meaning of what they have read, they could be exposed to enhanced constructions in or from the text. In line with this, R. Ellis (2003) also suggested, as mentioned in Section 2.1.5., that the post-task stage is probably the ideal point to direct learners' attention to form in a task-based lesson, as it increases the likelihood that learners' primary focus on meaning remains

uninterrupted in the during-task stage. To date, no empirical research has explored this possibility with respect to textual enhancement.

Hence, besides investigating the effect of providing explicit grammar instruction in combination with textual enhancement, the present thesis intends to address two factors that have been highlighted as providing potential explanations for the absence of effects for textual enhancement in previous studies: (1) employing short-term, often one-shot designs instead of longitudinal treatments, and (2) creating conditions for simultaneous rather than sequential processing of the meaning and form associated with the target construction (Han et al., 2008). Additionally, the study examines a much-underrepresented population, child EFL learners. A key gap in research on textual enhancement is that most of them involved adult learners and rarely children. Given that most L2 instruction is targeted towards children, it seems vital for future studies to examine the effects of textual enhancement with this population.

Besides the use of textual enhancement and explicit instruction as focus on form techniques, another promising platform for focus on form is learner interaction. L2 interaction has been proposed and empirically shown that, in addition to providing input, it can help draw learners' attention to form-meaning connections (Loewen & Sato, 2018; Long, 1996; Mackey & Goo, 2007; Sato & Ballinger, 2016). The sections to follow will provide further theoretical and pedagogical rationale for engaging learners in L2 interaction and review previous studies that have motivated the present study to investigate interaction among child EFL learners.

2.4. Interaction in Second Language Learning

From a psycholinguistic theoretical perspective, Long (1996) considers interaction as opportunities for learners to negotiate meaning and form and to direct learners' attention to

gaps in their knowledge. Researchers informed by Vygotskian sociocultural theory also regard interaction as opportunities to allow learners to deliberate about the L2 and in doing so co-construct new knowledge or consolidate prior L2 knowledge (Storch 2002, 2013; Swain, 2000, 2010). As such, there is theoretical rationale for engaging learners in tasks that require pair and small group work where learners are given opportunities to interact in the target language.

As a way to analyse learner interaction in which learners either discuss or question their own or others' use of the L2 while carrying out a given task, a growing number of research has examined language-related episodes. The following section will discuss how language-related episodes are defined and review previous studies that elucidate the differences between child and adult interaction.

2.4.1. Attention to Form and Language Related Episodes (LRE)

Swain and Lapkin (1998) define LREs as “any part of a dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others” (p.326). More specifically, LREs include instances where learners may discuss (a) the meaning of a linguistic item, (b) the accuracy of a word's spelling or pronunciation (c) the accuracy of a grammatical form, or (d) explicitly or implicitly correct their own or other's usage of a word, form, or structure (Leeser, 2004). Additionally, LREs may involve the use of metalinguistic terminology or explanation of rules although such instances are rarely seen (Swain, 1998; Williams, 1999). LREs have received substantial attention in focus on form research considering that this kind of attention to form could serve the function of assisting learners to make L2 form-meaning connections in meaning-based communicative contexts (Swain & Lapkin, 1998, 2001). Also, the dialogue that surfaces when students work together to solve linguistic problems while performing communicative tasks are said to represent

second language learning in progress and studies have reported a relationship between LREs and L2 development (Gass & Mackey, 2007; Swain & Lapkin, 2001). LREs have been examined across several different contexts. For example, in laboratory-type settings where participants engage in pair or small group tasks (e.g., Gass et al., 2005; Swain & Lapkin, 1998; Watanabe & Swain, 2007), in foreign language contexts (Kim & McDonough, 2011; Philp et al., 2010), and computer-mediated environments (Yilmaz, 2011; Yilmaz & Granena, 2010). A wide array of factors have been found to influence the incidence, nature and resolution of LREs such as (a) task features (García Mayo, 2022; Gass et al., 2005; Swain & Lapkin, 2001); (b) L2 proficiency (Kim & McDonough, 2008; Leeser, 2004; Watanabe & Swain, 2007); (c) pairing method (Mozaffari, 2016; Storch & Aldosari, 2013); (d) number of participants (Edstrom, 2015); and (e) task-modality (García Mayo & Azkarai, 2016; Martínez-Adrián & Gallardo-del-Puerto, 2021).

An aspect of LRE research that has not received much attention is the use of LREs among children learning a foreign language. A large amount of previous research on learner interaction during pair or group work has focused on adults in English as a Second Language (ESL) settings (García Mayo, 2018), who are likely to be more language-focused than children. As pointed out by several researchers, there are significant differences between child and adult SLA, and research findings from adults should not be generalized to children unless they are based on empirical evidence. Children between the ages of 6-12 are considered to be in middle childhood. At this phase of childhood, children are not yet abstract in thinking but are able to consider multiple aspects of a problem and the perspective of others (García Mayo, 2018; Philp et al., 2008). At a linguistic level, they show greater metalinguistic awareness compared to their younger peers and are more aware of the pragmatics of speech acts (Philp et al., 2008).

The pioneering work by Oliver (2002) shows several differences between child and adult interactions. The study examined the conversational interactions between 192 ESL children aged 8 to 13 years old while completing a one-way and two-way communicative task. The participants were paired to form age- and gender-matched dyads and assigned to different groups according to proficiency level, age, gender, and native/non-nativeness. The results showed that unlike adult learners, low proficiency matched nonnative dyads produced the most amount of negotiation, with the amount gradually decreasing as the dyads became more native-like in proficiency. Also, contrary to adult studies, no significant differences were found for age or gender.

In the case of EFL settings, Pinter (2007) investigated the interaction of two 10-year-old Hungarian children while completing three sets of the same spot-the-difference task. The results showed that children of this age were capable of providing peer assistance and interacting with each other in ways that were beneficial for language learning. More recently, Calzada and García Mayo (2021) examined 62 sixth grade EFL children as they were completing a collaborative dictogloss task. The third person singular *-s* morpheme was seeded into the task to examine whether the children paid attention to this form. The analyses of LREs showed that the children focused significantly more on form compared to meaning, demonstrating that even children with low proficiency level are able to discuss grammar to a considerable extent. However, they focused more on other grammatical forms than the target construction. It was also found that the participants managed to correctly resolve most of the linguistic problems encountered while performing the task with peer assistance alone.

Given that EFL programs for children are increasing worldwide (Enever, 2018; Pinter, 2011), as well as being introduced during primary school years (Muñoz, 2017), more research is needed to examine the contexts in which children voluntarily discuss language during pair and group work. In addition, considering that advancements in technology are rapidly

transforming teaching and learning practices, it seems essential to examine how learning opportunities afforded by interaction can be best achieved in computer-mediated learning contexts as well.

2.4.2. Task-Based Computer-Mediated Communication and Language Related Episodes

Although research on computer-assisted language learning (CALL) is not new, researchers have stressed the importance of grounding its design and application in reliable and empirically supported approaches to language learning and teaching (González-Loret & Ortega, 2014; Ziegler, 2016). To achieve this, several scholars have suggested the use of TBLT as a framework for developing technological designs for language learning (e.g., Chapelle, 2003; Doughty & Long, 2003; González-Loret & Ortega, 2014). Chapelle (2003) claims that using the ‘classroom task’ as a unit of analysis would benefit the field of CALL since “tasks direct methodologists to look toward how learners are expected to learn through their interactions with the materials and other learners” (p. 39). Similarly, proponents of TBLT have also recognized the value of integrating technology into task-based instruction designs (Doughty & Long, 2003; Skehan, 2003; Thomas & Reinders, 2010). For example, Motteram and Thomas (2010) pointed out that, given the importance of technology in mediating communication in the classroom, and the digital competence and expectations learners bring to the class, TBLT needs to devote greater attention to technology-mediated tasks for it to advance forward. Also, in an edited collection by González-Loret and Ortega (2014) which explores the reciprocal benefits of TBLT and technology, it is suggested that TBLT can be greatly enhanced by the infusion of new technologies whilst new technologies can bring valuable assistance to language learning when the foundations of TBLT are effectively applied.

Although not always within the framework of TBLT, tasks have been used extensively in Synchronous Computer-Mediated Communication (SCMC) literature. The majority of these studies have focused on performing tasks in a written text-chat environment and how it can facilitate L2 development (see Ortega, 2009, for a review). According to Pellettieri (2000) synchronous text-chat may assist L2 development more effectively than face to face (FTF) contexts, as it provides extra time for learners to think about their language use in addition to a visual display of their written output. Research has also provided convincing evidence that similar to FTF contexts, SCMC-based interaction can create opportunities for learners to focus on form by encouraging negotiation of meaning and modified output (e.g., De la Fuente, 2003; González-Lloret & Ziegler, 2021; Pellettieri, 2000; Smith, 2003; Ziegler, 2016).

Among the different types of tasks, jigsaw and dictogloss tasks have been widely investigated in SCMC for their potential to direct learners' attention to linguistic features in a meaningful context and elicit metatalk (Yanguas & Bergin, 2018). For example, Blake (2000) compared the amount of negotiation of form occurring among 50 intermediate learners of Spanish completing three different types of tasks, namely a jigsaw task, a one-way information gap task, and a decision-making task, while using a text-chat program. The results showed that, although only a small percentage of the conversational turns contained instances of negotiation of form, the jigsaw task elicited the most negotiation while the one-way information gap task elicited the fewest. On the contrary, Smith (2003) found that decision-making tasks, when embedded with unknown lexical items, elicited more negotiation of form than jigsaw tasks. More recent studies have started to examine the amount and type of language-related episodes (LREs) in task-based SCMC contexts. For example, Yilmaz and Granena (2010) compared LREs generated by 10 ESL learners performing a dictogloss task and a jigsaw task using MSN Messenger, a synchronous chatting

program. The results showed that the dictogloss task generated significantly more LREs than the jigsaw task. This finding was confirmed again in a later study by Yilmaz (2011) which reported more LREs being elicited with the dictogloss task than the jigsaw task. This study also found that the jigsaw task elicited more LREs related to content whereas the dictogloss task generated more LREs related to form. Based on these findings, Yilmaz argued that since a jigsaw task requires learners to share the pieces of information they each hold and build the plot of the story together, it makes it difficult for learners to divert their attention from message content to language form.

As previously mentioned, however, most research on task-based SCMC has been carried out using text-chat. Nowadays, most laptops and mobile devices are equipped with cameras and microphones. Internet connections are also becoming more accessible, stable, and fast. Such technological advances have made it more favorable for implementing oral SCMC in the L2 classroom. Moreover, ever since the COVID-19 pandemic, there has been a sudden growth in using video-chat programs such as Skype and Zoom for education. According to L. Lee (2007), video SCMC shares many similarities with FTF interaction such as visual and situational cues, which are inevitably absent in written SCMC. Nevertheless, research investigating the effects of audio or video SCMC on L2 development remains relatively scarce (e.g., Bueno-Alastuey, 2011, 2013; Jepson, 2005; L. Lee, 2007; Yanguas, 2010, 2012; Yanguas & Bergin, 2018).

Among the handful of studies that have investigated task-based video SCMC, studies by Yanguas (2010, 2012) have revealed important variations between the interactions that take place in different modalities. For example, Yanguas (2010) compared 15 dyads completing a jigsaw task embedded with unknown vocabulary items in three different modes: audio SCMC, video SCMC, and FTF. The results revealed differences between the audio and video groups in terms of negotiation of meaning and contributed the lack of visual cues in the

audio group for generating more linguistic negotiation. However, no differences were found between the video and FTF group. Additionally, contrary to what has been reported for written SCMC, similar patterns of turn-taking were found between the oral SCMC and FTF groups. Hence, Yanguas argues that both audio and video SCMC are closer to FTF interaction compared to written SCMC, which often involves short time delays between the initiation of an utterance and the interlocutor's response to it (Smith, 2003). Another study by L. Lee (2007) explored L1-L2 dyads in task-based video SCMC. She conducted interviews with the participants to examine their experiences in using video-conferencing as a tool to develop L2 oral skills. The study found that, like many previous SCMC studies, L2 vocabulary triggered the most negotiation of meaning. Also, it was suggested that using well-designed tasks, carefully selecting the linguistic context, and providing students with sufficient training in video-conferencing are essential for enhancing the benefits of video SCMC for language learning.

While benefits may differ across technologies and modalities, research is increasingly showing the positive impacts of using technology in task-based learning environments. However, there is still much to explore in relation to the implementation of video-based SCMC in the L2 classroom and its effects on L2 development, a gap the present thesis seeks to provide further insight on.

2.5. Summary of Research Gaps and Thesis Aims

Research on task-based language teaching increasingly informs us of the benefits of engaging learners in tasks. A key principle of TBLT is that meaning-based instruction through tasks needs to be accompanied with timely focus on form. Much of the existing research on focus on form in the context of TBLT, however, has focused on the acquisitional benefits of enacting focus on form during oral task performance. Although most definitions

of task subsume all language skills, little is known about the extent to which task-based development can be fostered through incorporating focus-on-form interventions into task-based reading sequences. This is a key gap in TBLT research that the present thesis aims to address by examining the impact of textual enhancement, an implicit focus-on-form technique, on developing grammatical knowledge through L2 reading.

Based on previous research which has reported small effects of textual enhancement, the present thesis sought out to use the post-task stage of a reading lesson to focus on form. It was hypothesized that enacting textual enhancement in the post-task stage would allow learners to allocate more attention to form since, compared to the during-task stage, there would be less burden on processing for meaning. Further, given that the majority of previous studies on textual enhancement employed a single treatment design, the task-based treatment in the present thesis was given over several sessions to allow ample time for any effects of textual enhancement to surface.

To expand TBLT research on child language learners and learning contexts, the present study worked with elementary school students in their real classroom environments and in a synchronous computer mediated communication context. It has been suggested that learners' interactional behaviour may vary according to the age of the learners, and whether the tasks are performed face-to-face or online. In order to shed light on these issues, the present thesis examined language-related episodes among child foreign language learners completing post-reading tasks in a synchronous computer-mediated communication context.

CHAPTER 3

STUDY 1

This chapter describes the methodology used for Study 1, also published in *Language Teaching Research* (Chung & Révész, 2021), which aimed to compare the effectiveness of textually enhanced versus non-enhanced post-reading tasks on developing grammatical knowledge among child EFL learners. It first presents the research questions that guided the current study, followed by a detailed description of the study design, research ethics, the participants, the target form, and the measurement instruments employed. The procedures related to data collection and data analyses are then explained. The chapter ends with a summary of the results, discussions of the findings, and insights for Study 2.

3.1. Research Questions

As discussed in Chapter 2, previous research has examined TBLT in relation to learners' oral and written production, while largely neglecting the role of tasks in assisting L2 learning through reading. In addition, only a few studies have investigated the effects of post-reading tasks on L2 development and an even smaller amount on grammar acquisition. In order to fill these gaps and to further understand how focus on form can be best achieved during L2 reading within the framework of TBLT, the present study aimed to address the following research questions:

- (1) To what extent does textual enhancement in post-reading tasks affect the acquisition of third person singular *-s* among child EFL learners?
- (2) To what extent does textual enhancement in post-reading tasks affect the reading comprehension of child EFL learners?

3.2. Methodology

3.2.1. Study Design

As shown in Figure 2, the study used a pre-test post-test design and was conducted over five weeks. 49 beginner level elementary school students were randomly assigned to two groups. The groups differed as to the type of post-reading task they carried out, whether it involved textual enhancement (TE) of the target construction or not (+TE group vs. -TE group). As part of the treatment, participants engaged in reading-focused English as a foreign language lessons in their real classroom context. To establish participants' proficiency, the TOEFL Primary test was first administered. The pre-test and post-test included a grammaticality judgement test (GJT), and a post-study questionnaire was administered to learners.

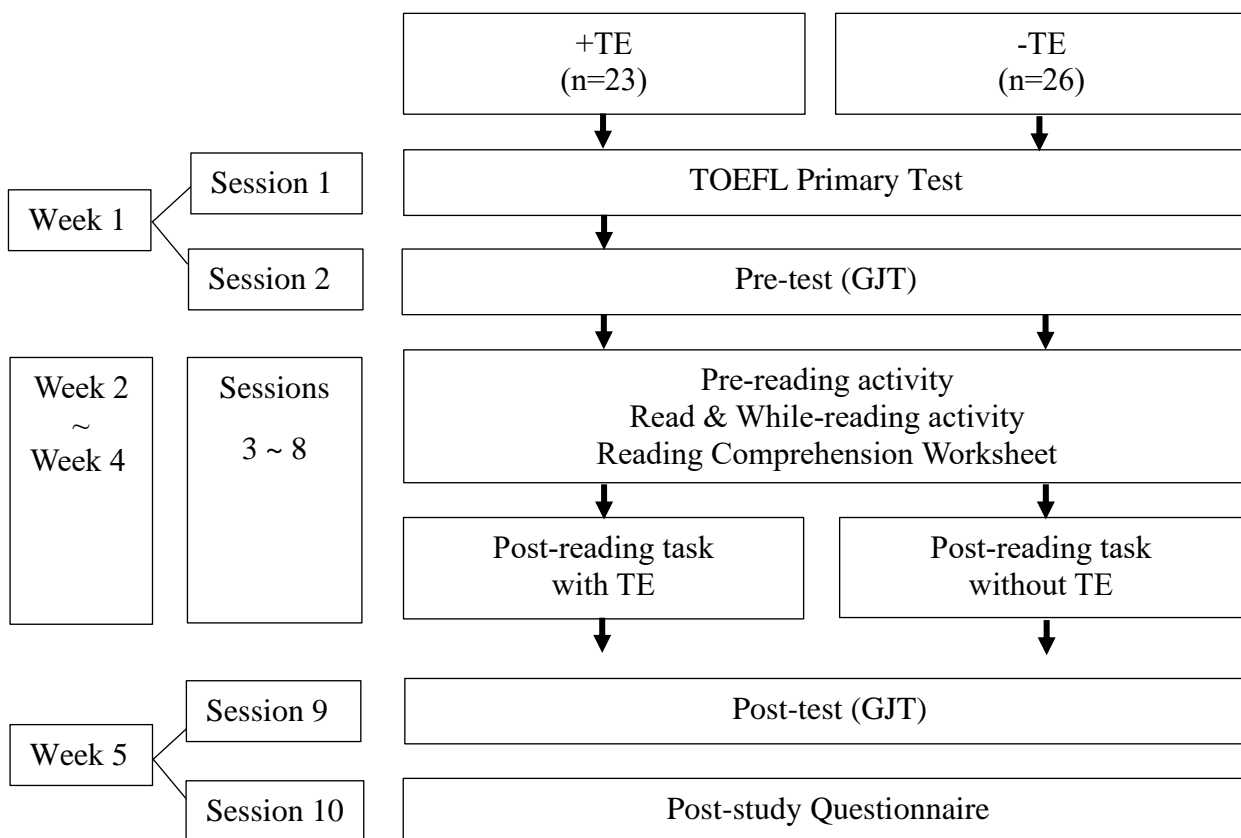


Figure 2. The Experimental Design

3.2.2 Participants

The participants were 49 fourth graders, with an average age of 9, from three intact classes at a local elementary school in Seoul, Republic of Korea. This particular cohort was selected for this study because the participants were able to read in their L1 and L2, although their L2 reading skills were at beginner level. Also, it was likely that the participants were developmentally ready to acquire the target form based on the school curriculum. As the participants were part of intact classes, they were not screened based on any criteria. However, outliers such as those with substantial or zero prior knowledge of the target form were excluded from the study. The participants in each class were randomly assigned to the +TE and –TE conditions.

All the participants began studying English as part of the school curriculum since third grade, but it is possible that some of them had already started learning English earlier outside of school. At the time of the study, the participants learnt English through two hours of classroom instruction every week by their homeroom teacher. The school curriculum followed the state elementary English curriculum, which adopts a communicative approach to language teaching. The teachers strictly followed a textbook recommended by the Korean Ministry of Education, and focused largely on listening, speaking and vocabulary. Also, the teachers used a mix of L1 and L2 in class.

3.2.3. Research Ethics

Research ethics approval was received for the present study from the Research Ethics Committee at the UCL Institute of Education, University College London. At the beginning of the study, the participants were given a general introduction and an information sheet explaining (a) the purpose of the study (b) the duration and procedure of the study (c) the

participants' right to withdraw from the study, and (d) the measures taken to ensure privacy and confidentiality. The participants' consent to take part was obtained by them signing a consent form (see Appendix A-1). As the participants were children, an information sheet explaining the same content was given to the participants' parents and their consent to allow their children to participate in the study was also obtained by them signing a consent form (see Appendix A-2).

3.2.4. Target Linguistic Construction

The target form in this study, the third person singular *-s* inflection, was chosen for several reasons. Firstly, in Korean the concept of subject-verb agreement does not exist, thus understanding and remembering to apply this rule can be difficult for learners. According to Blom et al. (2012) English L2 children whose first language has no feature similar to the third person *-s* will lack prior knowledge of the inflection. As a result, these children might not initially attend to, or perceive, the third person *-s* in English. The example below shows how the Korean language does not conjugate verbs using agreement with the subject.

- a. 그녀는 아침 7시에 **일어난다**.
“She wakes up at 7 o'clock in the morning.”
- b. 그들은 아침 7시에 **일어난다**.
“They wake up at 7 o'clock in the morning.”

Second, the third person *-s* is a communicatively redundant linguistic feature since the pronoun or noun used as the subject of the verb also signals the agent of action. Hence, meaning can be conveyed successfully without using the *-s* inflection. Also, the third person *-s* has low salience. Drawing on associative learning research, N. Ellis (2006) discusses ‘blocking’ as a factor linked to problems with acquiring third person *-s*. Blocking occurs when there are two linguistic cues that jointly predict an outcome, and the more salient cue

becomes more strongly associated with the outcome leaving the less salient one being overshadowed. In the case of the third person *-s*, the subject of the verb and the inflection jointly signal the meaning of ‘person,’ but the pronoun or noun used as the subject is perceptually more salient. As the learner starts to pay less attention to the *-s* morpheme, it can become blocked from further subsequent learning. Moreover, the third person *-s* is a voiceless consonant and a meta-analysis by Goldschneider and DeKeyser (2001) found that L2 morphemes that lack physical salience are late acquired. In addition, the multifunctionality of the morpheme *-s*, for example to denote plurality and possession, can create confusion or difficulty among learners (N. Ellis, 2006). Since the third person *-s* is a feature prone to fossilization in adulthood (Han, 2013), it seems important to identify learning conditions that can facilitate the acquisition of this linguistic construction among children learning English as a second language.

3.2.5. Reading Materials for Treatment Sessions

The study used six graded readers as reading materials for the treatment sessions (see Table 2). They were designed for beginner-level young EFL learners (band A1 according to the Common European Framework for Reference), so they were considered appropriate for the participants. The selection was based on whether the books provided ample exposure to the target construction. As shown in Table 2, the word count of the graded readers ranged from approximately 400-550 words, with the majority including roughly 40 instances of the target form. The school library had a small selection of English children’s books and graded readers. The teachers confirmed, however, that the participants had not been exposed to graded readers in the past as part of their English lesson.

Table 2. Description of the Graded Readers

	Book 1	Book 2	Book 3	Book 4	Book 5	Book 6
Title	Pete the Cat at the Beach	Pete the Cat and the Cool Caterpillar	The Boy and the Violin	The Gingerbread Man	The Shoemaker and the Elves	Three Billy Goats
Word Count	431	445	521	550	527	444
No. of Instances of the third person -s	47	53	44	42	30	42

3.2.6. Experimental Treatment Task (Post-reading Task)

In preparation for each treatment session, eight pictures were extracted from the book that students would read that day, and these were divided into two sets of four pictures (sets A and B) (see Appendix B). As part of the pre-reading activity, half of the students received set A and the other half set B, and their task was to sequence the pictures, individually, in the order they thought the story would happen. Then, the researcher read the book to the students, who either listened quietly or read along. Afterwards, the students were told to read the story again on their own. While reading, they were also asked to check whether they had guessed the order of the four pictures correctly. Immediately after reading, the students completed a true or false reading comprehension worksheet (see Appendix C). This was included to assess whether the post-task experimental manipulations would affect text comprehension in subsequent treatment sessions.

Next, the participants engaged, still individually, in the first part of a post-reading task. Each student received a worksheet, which contained eight sentences. Four sentences started with a single subject pronoun followed by a verb with the -s inflection, whereas four sentences began with plural subject pronouns. These sentences were borrowed either straight from the book or modified so that they would have a simple subject-verb-object structure with no intervening clauses or phrases. Using the set of four pictures from the pre-reading

activity, the participants were asked to find the sentence that best described each picture, and then write it under the picture. In the +TE condition, the sentences in the worksheet had the verbs printed in bold and the morpheme *-s* underlined. Under the –TE condition, the list of sentences did not include enhancement (see Appendix D).

Once the students had finished writing, they moved onto the second part of the post-reading task, which involved pair work. Students were paired so that one student had previously worked with set A of the pictures and the other set B. They were asked to put all eight pictures in the correct order together. Then, their task was to write an ending for the story with their partner. The students were told that each person had to contribute at least one sentence to the end of the story (See Appendix E). For both groups, the final outcome was a miniature book, which contained eight ordered pictures with descriptions and an extra page with the end of the story.

This sequence of activities meets the criteria for tasks as defined by R. Ellis (2003, see also Section 2.1.2). For most of the task, participants' focus likely remained on meaning; there was an information gap as participants had different parts of the story to begin with; learners used their own linguistic repertoire to carry out the activity; and the sequence resulted in a miniature book, that is, a clear outcome besides the use of language.

3.2.7. Assessment Tasks

3.2.7.1. TOEFL Primary Test

The reading section of the TOEFL Primary test Step 2 was used to determine whether there were any initial differences in reading ability among the two groups. The test was chosen because it is designed for young students who have been learning English for a year or more. It assesses students' reading skills such as understanding a story of about 250 words, finding and interpreting information in menus or schedules, and understanding a sequence of

instructions. The test required students to read a paragraph or a short passage and answer three to four comprehension questions and the entire test consisted of 37 multiple-choice questions. The participants were given 30 minutes to complete the test. Following the TOEFL Primary scoring guidelines, the test was scored dichotomously by giving one point for each correct answer, resulting in a maximum score of 37. The reliability of the test was measured using Cronbach's alpha and it was found to be highly reliable $\alpha = .90$.

3.2.7.2. Reading Comprehension Questions

In order to examine the participants' understanding of the texts, True or False reading comprehension questions were designed by the researcher. Six questions were constructed for each book. The students had to decide whether statements were true or false based on the story they had read (see Appendix C). The questions were administered immediately after each reading. The participants were given five minutes to complete the questions, and no feedback was given on their responses. As for scoring, one point was given for each correct answer resulting in a maximum score of six. The internal consistency reliability for all comprehension questions combined ($n = 36$) was very good ($\alpha = .82$).

3.2.7.3. Grammaticality Judgement Test (GJT)

As a pre- and post-test, an untimed GJT was administered to measure changes in the participants' declarative knowledge of the third person singular -s before and after treatment. The GJT was developed following the guidelines from Keating and Jegerski (2015). The test consisted of 48 items in total, with 16 target items and 32 items serving as distractors. Among the 16 target items, eight were grammatical with four items beginning with a plural subject and four items with a singular subject. The remaining 8 items were ungrammatical with four

items starting with plural subjects and four with singular subjects. For the ungrammatical items, either the morpheme *-s* was incorrectly omitted or incorrectly added to the base form of the verb, thus violating the subject-verb agreement. In order to prevent participants from making guesses, a 3-point scale was used with the options of correct, incorrect and maybe.

Following Keating and Jegerski (2015), the items were pseudorandomized so that two verbs with the morpheme *-s* were not given immediately after one another. In addition, the verbs of the target items were the same in length (i.e., one-syllable verbs), always located in the same position, and only personal pronouns were used as the subject. The length of the target items was kept similar ranging from six to seven syllables. To avoid item effects, two versions were designed for each item which differed as to whether the item was grammatical or ungrammatical (see Table 3). As for the distractors, there were equal numbers of grammatical and ungrammatical items, and there were twice as many distractors than target items in order to conceal the aim of the study. Also, the length of the distractors was the same as that of the target items. The present progressive, past tense, and possessive pronouns were the three constructions used for the distractors. Furthermore, to avoid repetition effects half of the students received Version A and the other half Version B of the GJT. The positions of the test items and the pre-test and post-test versions were also counterbalanced. The reliability of each version of the GJT was evaluated using Cronbach's alpha. All two versions were found to be reliable (set A: $\alpha = .70$, set B: $\alpha = .66$).

Before administering the GJT, participants completed a set of practice items so that they could become familiar with the format of the test. WH- questions were used for these practice items. All instructions were provided in Korean, the participants' L1. As for scoring, one point was awarded for each correct response and zero for 'maybe' and incorrect responses. Out of the 48 question items, only items that measured knowledge in the third

person -s (target form) were assessed resulting in 16 items. Hence, the maximum score was 16.

Table 3. Pseudorandomization Pattern of the GJT

Pre-test		
Item	Version A	Version B
Distractor	I'm reading a book now.	
Distractor	He bag is in the bedroom.	
Target item	She eat a hamburger for lunch.	She eats a hamburger for lunch.
Distractor	He walked to school that day.	
Distractor	She's wear a nice hat.	
Target item	They jump around the garden.	They jumps around the garden.
Distractor	Michael called the doctor.	
Distractor	He'll cooking dinner at 7 o'clock.	
Target item	He chases the cat every day.	He chase the cat every day.
Distractor	I'm opening the door now.	
Distractor	My sister can to drive.	
Target item plural	They sees a spider in her room.	They see a spider in her room.
Post-test		
Item	Version A	Version B
Distractor	I'm writing a book now.	
Distractor	He jacket is in the bedroom.	
Target item	She eat pizza for lunch.	She eats pizza for lunch.
Distractor	He walked to church that day.	
Distractor	She's wear a nice skirt.	
Target item	They run around the playground.	They runs around the playground.
Distractor	Michael called the teacher.	
Distractor	He'll cooking lunch at 12 o'clock.	
Target item	He chases the bird every day.	He chase the bird every day.
Distractor	I'm opening the window now.	
Distractor	My sister can to sing.	
Target item plural	They sees a table in the room.	They see a table in the room.

3.2.7.4. Post-Study Questionnaire

After the study was over, the participants were asked to answer two Likert scale items investigating their perceptions about the post-reading tasks. These items asked whether the students thought that the post-reading tasks were (1) interesting and (2) useful for developing their English. The Likert scales included three options: Yes, Neutral, and No. When

analyzing the items, 2, 1 and 0 points were awarded to Yes, Neutral and No responses respectively. The questionnaire was administered in Korean.

3.2.8. Data Collection Procedure

Data was collected over five weeks and ran from April to May 2019. The study took place twice a week on Wednesdays and Thursdays and each session lasted 40 minutes. On day one, students completed the TOEFL Primary Test. The participants were given 30 minutes to do the test. On day two, the GJT pre-test was administered, which lasted 30 minutes. From day three to eight, the participants took part in the treatment sessions with the two groups engaging in different types of post-reading tasks. During each session, the participants first engaged in a pre-reading activity individually which involved them sequencing four pictures extracted from the book in the order they thought the story would happen. Then, the students read the book, and while reading they checked whether they had guessed the order of the pictures correctly. Immediately after reading, the students completed a reading comprehension test. The duration of the pre- and while-reading stage was approximately 20 minutes. Afterwards, the participants engaged in their respective post-reading task in pairs which also took roughly 20 minutes. On day nine, the GJT was administered as a post-test and on the last day the students completed the post-study questionnaire.

3.2.9. Statistical Analyses

As a preliminary step, independent samples *t*-tests were conducted to compare the participants' performance under the +TE and -TE conditions on the reading component of the TOEFL Primary Test and the GJT pretest. To assess participants' performance on the

reading comprehension scores across the two conditions, a Mann-Whitney U test was run as the data did not meet the normality assumption. To address the research questions, a mixed-model ANOVA analysis was carried out. An alpha level of .05 was set as the criterion for significance. To measure effect sizes, Cohen’s d values were computed for the independent-samples t -tests, r values for the Mann-Whitney test, and η^2 values for the ANOVA. Following Plonsky and Oswald (2014), Cohen’s d values above .40, .70, and 1.00 and r values of .25, .40 and .60 were considered as small, medium and large, respectively. The η^2 values were computed and interpreted following the guidelines outlined in Norouzian and Plonsky (2018). Standard diagnostic procedures were run to check whether the data met the assumptions for the analyses.

3.3. Analyses and Results

3.3.1. Preliminary Analyses

3.3.1.1. Internal Consistency Reliability

Table 4 presents a summary of reliability statistics for the TOEFL Primary test, the two versions of the grammaticality judgement test, and the reading comprehension questions all combined. Cronbach’s alpha for each test was found to be acceptable.

Table 4. Internal Consistency Reliability

	N	M	SD	α
TOEFL Primary Test - Reading	49	20.26	8.04	.90
Grammaticality Judgement Test -A	49	16.50	4.74	.70
Grammaticality Judgement Test -B	49	15.64	4.54	.66
Reading Comprehension Questions	49	28.43	4.31	.82

TOEFL Test: Max. = 37; Grammaticality Judgement Test: Max. = 16; Reading Comprehension Questions: Max. = 36

3.3.1.2. Comparability of the Groups

Table 5 summarizes the descriptive statistics for each group's performance on the pretests for the TOEFL Primary test and grammaticality judgement test. An independent samples t-test confirmed that there was no significant difference between the two groups in terms of reading proficiency, $t(47) = -.42, p = .68, d = .12$, and prior knowledge of the third person -s morpheme $t(47) = -1.34, p = .19, d = .38$ at the outset of the study.

Table 5. Descriptive Statistics for the Two Pretests

Condition	<i>N</i>	<i>Mean</i>	<i>SD</i>	95% CI	
				<i>Lower</i>	<i>Upper</i>
TOEFL Primary Test					
+Textual enhancement	23	17.22	7.90	13.80	20.63
-Textual enhancement	26	18.15	7.74	15.03	21.28
GJT					
+Textual enhancement	23	6.91	2.78	5.71	8.11
-Textual enhancement	26	7.85	2.07	7.01	8.68

TOEFL Primary Test: Max. = 37; GJT: Max. = 16

3.3.1.3. Post-Study Questionnaire

Participants' responses to the post-study questionnaire items are summarized in Table 6. The two groups gave similar ratings as to whether they found the post-reading tasks interesting or useful. According to Mann-Whitney *U* tests, there was indeed no significant difference in the ratings of the students under the +TE and -TE conditions for either questionnaire item, Interest: $U = 273.00, z = -.66, p = .51, r = .09$, Usefulness: $U = 289.00, z = -.237, p = .81, r = .03$.

Table 6. Descriptive Statistics for Post-study Questionnaire Responses

Condition	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>SD</i>	95% CI	
					<i>Lower</i>	<i>Upper</i>
Interest						
+Textual enhancement	23	1.74	2.00	.45	1.55	1.93
-Textual enhancement	26	1.54	2.00	.76	1.23	1.85
Usefulness						

+Textual enhancement	23	1.61	2.00	.58	1.36	1.86
-Textual enhancement	26	1.58	2.00	.58	1.34	1.81

Note. The maximum value was 3 on the Likert scales.

3.3.2. Main Analysis

3.3.2.1. Results for the Grammaticality Judgement Test

As shown in Table 7 and Figure 3, the textual enhancement group achieved greater pretest-posttest gains on the GJT than the group which received no textual enhancement during the post-task stage. To test the significance of this difference and thereby address research question 1, a mixed-model ANOVA analysis was conducted. Time served as a within-subject variable, and group was the between-subjects factor. As Table 8 demonstrates, the analysis yielded a significant interaction between time and condition with a small effect size, accounting for two percent of the variation in scores ($\eta^2 = .02$). This means that textual enhancement had a positive, but small impact on participant’s pretest-posttest gains, with the group exposed to textual enhancement showing somewhat greater development from the pretest to the posttest than the group which received no textual enhancement.

Table 7. Descriptive Statistics for Scores on the GJT

Condition	<i>N</i>	<i>M</i>	<i>SD</i>	95% CI	
				<i>Lower</i>	<i>Upper</i>
+Textual enhancement					
Pretest	23	6.91	2.78	5.71	8.11
Posttest	23	8.91	3.16	7.55	10.28
Gain	23	2.00	2.37	.96	2.91
-Textual enhancement					
Pretest	26	7.85	2.07	7.01	8.68
Posttest	26	8.42	2.39	7.46	9.39
Gain	26	.58	2.35	-.31	1.38
Maximum Score 16					

Table 8. Results for Mixed-Model ANOVA Comparing Pretest-Posttest Gains

Source	<i>df</i>	<i>F</i>	<i>p</i>	η^2
Time	1	14.52	<.01	.06
Time * Condition	1	4.43	.04	.02

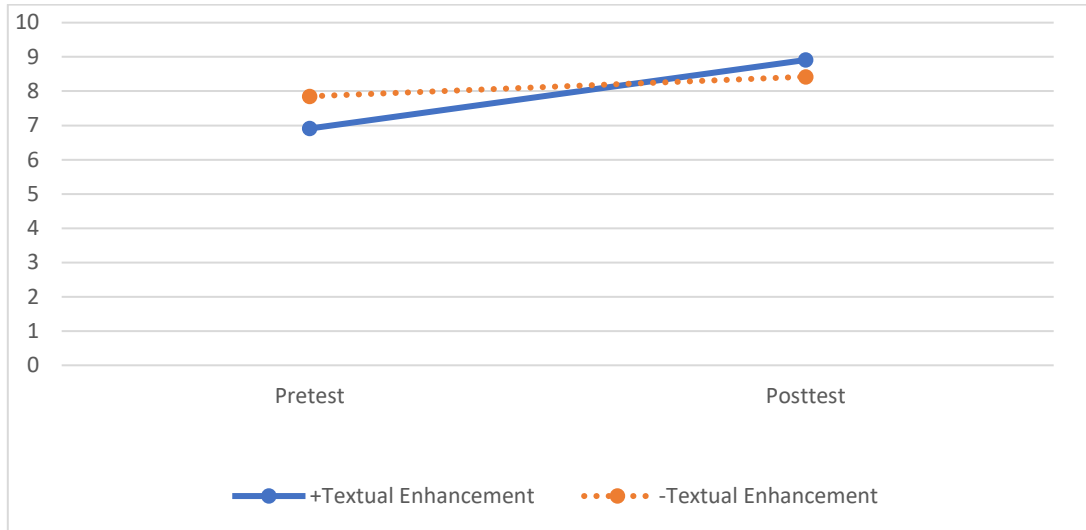


Figure 3. Pretest and Posttest GJT Scores for the +TE and -TE Groups

3.3.2.2. Results for the Reading Comprehension Questions

The descriptive statistics for the comprehension data appear in Table 9. As the overall comprehension scores indicate, participants displayed a very good understanding of the graded readers regardless of whether they received or did not receive textual enhancement in the post-reading tasks. In order to address research question 2, a Mann-Whitney *U* test was run to examine whether there were significant differences between the two groups. Indeed, there was no significant difference between the +TE and -TE groups in terms of reading comprehension throughout the experiment, $U = 205.00$, $z = -1.90$, $p = .06$, $r = .27$. The effect size was in the small range. This means that whether learners were exposed to textual

enhancement in the post-reading task had no significant impact on their overall reading comprehension scores.

Table 9. Descriptive Statistics for Reading Comprehension Scores by Condition

Condition	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>SD</i>	95% CI	
					<i>Lower</i>	<i>Upper</i>
+Textual enhancement	23	30.43	32.00	4.47	28.50	32.37
-Textual enhancement	26	32.23	34.00	4.30	30.49	33.97

Maximum Score 36

3.4. Interim Discussion

3.4.1. Effects of Textual Enhancement in Post-Reading Tasks on the Acquisition of Third Person Singular -s

The first research question examined the extent to which textual enhancement incorporated into post-reading tasks can improve child EFL learners' knowledge of the third person -s, as measured by a grammaticality judgement test. The results revealed that participants who were exposed to textual enhancement demonstrated significantly greater pretest-posttest gains with a small effect size, as compared to those who engaged in post-reading tasks without textual enhancement. Although this result is well aligned with the findings of Lee and Huang's (2008) meta-analysis, it runs counter to a large number of previous studies which yielded null developmental effects for textual enhancement (e.g., Lee & Jung, 2021; Leow, 1997; Leow et al., 2003; Lyddon, 2011; Winke, 2013; Wong, 2003). As mentioned in the literature review, a variety of factors might influence the effectiveness of textual enhancement. Now we turn to a consideration of factors that might have contributed to the positive effects found here.

A key feature of the present study was the use of a multiple-exposure design. The participants in this study engaged in six treatment sessions over a three-week period. Despite

calls for more multiple-exposure research investigating textual enhancement (e.g., Han et al., 2008), studies with several treatments remain scarce, with most existing research involving only a single treatment session with less than an hour of total exposure to the target construction. However, as discussed earlier, in case textual enhancement succeeds in drawing learners' external attention to the target construction and thereby engaging their internal attention (Chun et al., 2011), the next step for learners, to achieve long-term gains, is to retrieve the resulting memory trace repeatedly. Such repeated exposure has been argued to be particularly important for implicit focus-on-form interventions such as textual enhancement. Although the effects of implicit techniques tend to be more durable, they typically take longer to generate gains (e.g., Long, 2015; Mackey & Goo 2007). In light of this, it is likely that in the present study, the longer treatment involving several sessions increased the likelihood that participants would develop their knowledge of the third person -s. In addition, the duration of the treatment appeared long enough for the effects of textual enhancement to manifest.

Another factor that might have facilitated the positive impact for textual enhancement in the current research is that textual enhancement was integrated into the post-task instead of the during-task stage of the reading lessons. Unlike here, the bulk of previous research included textual enhancement in the during-reading stage of the experiment. As highlighted by Han et al. (2008), this set up required learners to simultaneously process for meaning and form, which probably led to information overload on the part of participants. For L2 learners, neither processing for meaning nor form tend to be automatized, thus trade-off effects are likely to occur when learners need to engage in both at the same time (Skehan, 1996, 2009; VanPatten, 1996). In the present study, given that textual enhancement was incorporated into the post-task stage, learners could probably allocate their full attention to meaning in the during-task stage. Thus, by the time of the post-task stage, they might have had enough attentional resources left to pay attention to the enhanced grammatical construction. From a

task-based perspective, this design also had the advantage of making it less likely that learners' primary focus gets diverted from meaning in the during-task stage (R. Ellis, 2003).

A further reason for the success of textual enhancement in this study might have been that the participants were child second language learners. It has been suggested that children are more adept at learning languages implicitly than adults, who show a gradual decline in their ability to engage in implicit learning processes, relying more and more on explicit mechanisms to learn second languages (e.g., DeKeyser, 2000). Thus, once textual enhancement had caught children's attention in the present study, data-driven implicit learning processes may have more effectively operated on the memory traces that had been created than in the case of adult learners (N. Ellis, 2005). This difference might have had an especially pronounced influence in the current study, as participants did not only encounter enhanced versions of the target form in the post-task stage but were also exposed to non-enhanced exemplars in the during-task stage while reading the books. In other words, participants had opportunities to engage in implicit tallying of the construction not only in the post-task but also in the during-task stage.

This potential explanation relates to an additional factor that might have assisted in making textual enhancement work in the present research. Some researchers (e.g., Han et al., 2008; Leow, 2009; Leow & Martin, 2017) argued that textual enhancement is more likely to be effective when it is combined with another pedagogical technique, since such conflated or compound enhancement might help increase the salience of the target form. For the purposes of the current experiment, the treatment texts were selected in such a way that they contained a considerable number of the targeted feature, in other words, the texts were naturally flooded with the third person *-s* morpheme. This, together with textual enhancement, might have helped attract learners' attention to the target construction.

Finally, prior knowledge is a variable worth highlighting. As reflected in participants' pretest scores on the GJTs, the learners in the present experiment had some previous knowledge of the third person *-s* morpheme. Several researchers (e.g., Park, 2004; Winke, 2013) observed that textual enhancement is likely to be more beneficial when learners possess some existing knowledge of the enhanced construction. Given its subtle nature, textual enhancement is probably not explicit enough to trigger internal attention in the absence of some predisposition on the part of learners to process the targeted construction, even though it might capture learners' external or perceptual attention due to visual cues (Winke, 2013).

A question that remains is why textual enhancement still had a relatively small impact on children's gains despite all these facilitative factors working together. A possible explanation lies in the nature of the target construction. The third person *-s* is a construction notoriously difficult for L2 learners to acquire (N. Ellis, 2006). As discussed earlier, it is a non-salient feature with low communicative and physical salience, hence prone to blocking (N. Ellis, 2006) and fossilization (Han, 2013). Also, this is a construction that does not exist in the participants' first language. Taking all these factors together, it would, in fact, have been surprising if learners had shown larger gains after a three-week treatment period. Linguistic constructions with such characteristics are expected to require even more prolonged treatment to yield substantial benefits. Hence, it is promising that contrary to previous research findings (see Section 2.3.5.), repeated exposure to textually enhanced forms was able to promote development, however small, in the acquisition of a non-salient feature in the present research.

3.4.2. Effects of Textual Enhancement in Post-Reading Tasks on Reading

Comprehension

Research questions 2 examined the extent to which engaging in post-reading tasks affects reading comprehension. The results revealed that there were no significant differences in reading comprehension scores between the groups with and without textual enhancement. This indicates that engaging in post-reading tasks with textual enhancement did not detract learners from understanding the overall meaning of the texts. The findings lend support to previous studies which have found beneficial effects of textual enhancement on learning form without compromising a focus on meaning (e.g., Doughty, 1991; LaBrozzi, 2016; Révész et al., 2021). As mentioned in the previous section, integrating textual enhancement in the post-task stage may have enabled learners to focus primarily on comprehending the reading texts during the while-reading stage. This speculation is further confirmed by the data obtained through the post-study questionnaire which showed both groups giving similar ratings in terms of task usefulness and interest.

3.5. Limitations of Study 1 and Insights for Study 2

There are a number of limitations to this research, which need to be considered when interpreting its findings. First, the sample size was relatively small. It would be worthwhile to replicate the study with a larger group of students to increase the power of the design. Second, the absence of a delayed post-test is another weakness of this research. If a delayed post-test had been administered, it would have been possible to gain insights into whether the positive effects observed here could be retained in the longer term. To address this limitation, Study 2 incorporated both immediate and delayed post-tests. Another limitation that needs to be addressed concerns the assessment task used in Study 1. The participants' development

was only measured by a grammaticality judgement test. Initially, a writing task was administered as a pre- and post-test in order to measure the participants' procedural knowledge of the third person *-s*. The writing task consisted of nine pictures illustrating a sequence of events from a famous Aesop's Fable and the participants were asked to write sentences under each picture to complete the story. However, the writing task was excluded from analysis because it failed to elicit the target form. Since the participants were not told what linguistic construction to use, most of them wrote in the present continuous, a tense frequently seen in the English textbooks used in the participants' regular English classes. Hence, this limitation was acknowledged in Study 2 by changing the theme of the writing task to daily routines and by including frequency adverbs such as 'always' and 'sometimes' in the sentences to elicit the use of the third person singular *-s*.

This limitation also led to an interesting variable to explore, namely the effects of providing explicit grammar explanation in combination with textually enhanced post-reading tasks. Several researchers have suggested that textual enhancement may be more effective when accompanied by explicit rule presentation (e.g., Indrarathne & Kormos, 2017; Leow & Martin, 2018; Shook, 1994). However, the provision of explicit grammar instruction in TBLT literature has been a topic of controversy. Some argue against grammar instruction prior to task performance, suggesting that learners may not be developmentally ready for specific linguistic forms and that it can shift learners' focus away from meaning (e.g., Long, 2015; R. Ellis, 2003). This perspective aligns with the meaning-primary principle of task-based teaching. On the other hand, proponents of explicit grammar instruction emphasize its importance, asserting that teaching grammar before task performance is necessary for the development of proceduralization and automatization (e.g., DeKeyser, 1998, 2015). They also highlight that teachers, especially in foreign language contexts, prefer to provide explicit grammar instruction (see Section 2.3.3.). The debate surrounding explicit grammar

instruction in TLBT literature continues, reflecting divergent views on the optimal approach for balancing meaning and form in language teaching. Study 2 seeks to contribute to this ongoing discussion by examining the effectiveness of providing explicit grammar instruction before engaging in post-reading tasks with textual enhancement on developing L2 grammatical knowledge.

It would also be interesting to explore whether the effects found here would transfer to different types of learner populations and contexts. To partially address this, Study 2 was conducted online using Zoom mainly due to COVID-19, and the treatment tasks were given using Padlet. Finally, the absence of data regarding what aspects of language learners paid attention to while working on the post-reading tasks is another limitation of this study. Originally, the participants' pair interaction while performing the tasks were audio-recorded but this data was excluded because the voices of the students were muddled by the background noise. This limitation was addressed in Study 2 by video-recording students using the function available on Zoom.

CHAPTER 4

STUDY 2

This chapter reports on Study 2, which further investigated the extent to which textual enhancement in post-reading tasks can facilitate grammatical development among child EFL learners by including another variable, explicit instruction. Several limitations discussed in Study 1 were also addressed in Study 2. One major modification was that the study was conducted online. Although this was mainly due to the circumstances of COVID-19, it allowed the study to explore the effects of post-reading tasks in a different learning context (i.e., synchronous computer-mediated communication) and collect better quality video recordings of the participants, thereby resolving some issues encountered in Study 1. The research design was improved by including a delayed posttest and employing assessment tasks that measured both declarative and procedural knowledge of the target grammar.

This chapter begins by presenting the research questions and the methodology used to address them, including the research design, the participants, the research instruments, data collection procedures, and statistical analyses. Then, the results of the study regarding each research question are presented, followed by a discussion of the findings.

4.1 Research Questions

The research questions were as follows:

- (1) To what extent does explicit instruction prior to performing a post-reading task with textual enhancement affect the acquisition of third person singular *-s* among child EFL learners?
- (2) To what extent does post-task explicit instruction affect the number, linguistic focus, outcome, and level of engagement of LREs?

4.2. Methodology

4.2.1. Study Design

As shown in Figure 4, the study employed a pretest-posttest-delayed posttest design and was conducted over 8 weeks. 33 Korean EFL children were randomly assigned to two groups. The groups differed as to whether they received explicit instruction (EI) of the target form before performing the post-reading task or not (+EI group vs. -EI group). The treatment sessions involved reading a storybook, completing reading comprehension questions, and engaging in a post-reading task. The post-reading tasks were the same for both groups which had the target form textually enhanced. All sessions were conducted online using Zoom and Padlet. The pretests, posttests, and delayed posttests each included two assessment tasks – a grammaticality judgement test and a writing test – to examine development in the knowledge of the target form.

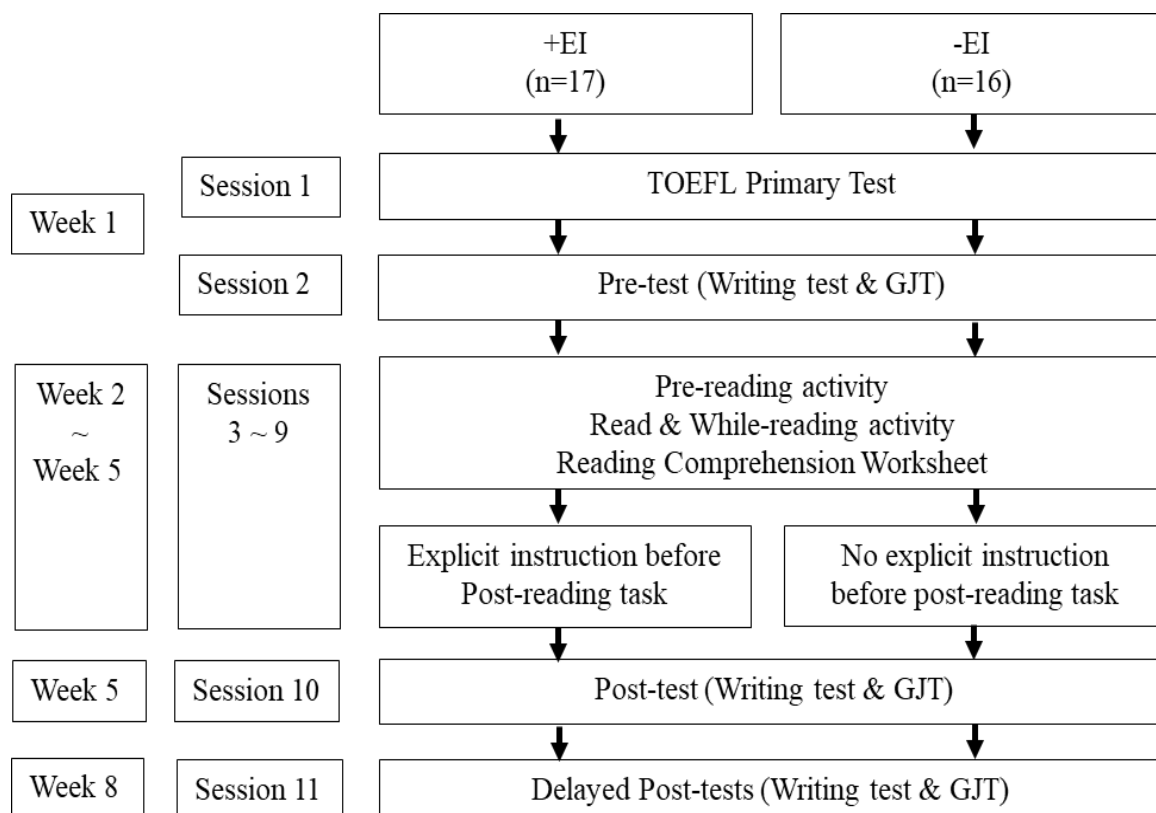


Figure 4. The Experimental Design

4.2.2. Participants

Initially, 40 Korean EFL children (ages ranging from 7 to 10) participated in the study. As the study was conducted as part of a local elementary school's extracurricular activity, the head of faculty was involved in the screening process. Those who were considered beginner level learners of English based on reports by each students' homeroom teacher and school exam records were selected to participate in the study. Further, participants who scored higher than 65% of the total score on the two assessment tasks at the pre-test were excluded to avoid ceiling effects. This threshold was set based on the distribution of scores. The highest score after the set threshold was 88% on the GJT and 78% on the writing task. The rationale for excluding participants who achieved high scores on the pretests was that prior knowledge of the third person singular *-s* could affect the role of explicit instruction on learning the target form. Also, those who missed any sessions were excluded from analysis. As a result, 33 learners were included (20 male and 13 female), of which 17 participants were assigned to the +EI group and 16 to the -EI group. All the participants were beginner level students and were recruited from the same local elementary school as Study 1, in Seoul, Republic of Korea.

At the time of the study, due to the pandemic, the students were only going to school three times a week, of which two hours were devoted to English classes. The approach to teaching was the same as Study 1, with classes focusing mainly on listening, speaking, and vocabulary. However, following COVID regulations, the students and teachers all wore masks at school and the focus on speaking was greatly reduced compared to previous years. In order to determine whether there were differences in general reading ability among the two groups at the outset of the study, the reading section of the TOEFL Primary test was administered. A Mann-Whitney *U* test confirmed that there were no group differences $U = 119.50, z = -.60, p = .56$.

4.2.3. Research Ethics

Research ethics approval for Study 2 was received from the Research Ethics Committee at University College London, Institute of Education. Prior to the study, the participants and their guardians were given an introduction and an information sheet describing (a) the purpose of the study (b) the duration and procedure of the study, (c) the participants' freedom to withdraw from the study at any time, and (d) the measures taken to ensure privacy and confidentiality. Each participants' agreement to participate in the study was obtained by signing an online consent form (see Appendix A-3). Additionally, as the participants were children, it was necessary to collect parental consent which was obtained by signing an online consent form as well (see Appendix A-4).

4.2.4. Target Linguistic Construction

The same target linguistic construction as Study 1, the third person singular *-s*, was chosen for the current study. As discussed in Chapter 3, the third person singular *-s* is known to be difficult to acquire due to the low saliency and multifunctionality of the morpheme *-s*. Additionally, acquiring the form can be challenging for learners whose first language, like Korean, does not conjugate verbs using agreement with the subject.

4.2.5. Reading Materials for Treatment Sessions

Seven graded readers targeted for beginner level young EFL learners (band A1 according to the Common European Framework for Reference) were selected for this study. These books were from the same graded readers series (Oxford Classic Tales level 1 and Earlyreads level 1) used in Study 1 and were chosen based on whether they provided ample

exposure to the target construction. As shown in Table 11, the word count of the graded readers ranged between approximately 500-600 words, with the majority including about 40 instances of the target form.

Table 10. Description of the Graded Readers

No.	Title	Word Count	Frequency of target form
1	Three Billy Goats	544	38
2	The Shoemaker and the Elves	527	30
3	The Gingerbread Man	550	40
4	The Magic Pot	562	42
5	Rumpelstiltskin	629	44
6	Lownu Mends the Sky	611	39
7	The Princess and the Pea	584	39

4.2.6. Experimental Treatment Task (Post-reading Task)

The same treatment tasks as in Study 1 were used but modified to fit the online context of Study 2. Hence, all tasks were created using Padlet, a collaborative web platform, and the treatment sessions were delivered using Zoom. This enabled the students to complete the tasks using their own devices and collaborate with their partners on the same screen during pair work. Also, as Study 1 found small benefits of incorporating textual enhancement in the post-reading tasks, the current study had the target form textually enhanced for all groups.

The treatment sessions followed the design of a task-based lesson and consisted of three phases: a pre-reading, while-reading, and post-reading phase. At the beginning of each session, the participants engaged in the same pre-reading activity individually. Each student was given a personal link (URL) to a Padlet page with four pictures extracted from a storybook that the students would read that session (Figure 5). The students were asked to predict and sequence the pictures in the order they think the story would happen. There were three different sets of these pictures (set A, B, and C) with each set containing four pictures.

Then, the storybook was read to the students by the researcher using the screen sharing function in Zoom. Afterwards, the participants were told to read the story again on their own. While they were reading, the students also checked whether they had guessed the order of the four pictures correctly. Immediately after reading, the students completed an online true/false reading comprehension quiz (Appendix F).



Figure 5. Sample of the Pre-Reading Activity

Next, the participants engaged in a post-reading task (Figure 6). They were instructed that they would find eight sentences in the bottom area of their Padlet page. Using the four pictures from the pre-reading activity, the participants were asked to find the sentence that best described each picture, then drag and place the sentence under each of the four pictures. As mentioned earlier, all the sentences were textually enhanced with the verbs boldfaced and the morpheme *-s* underlined for all groups.

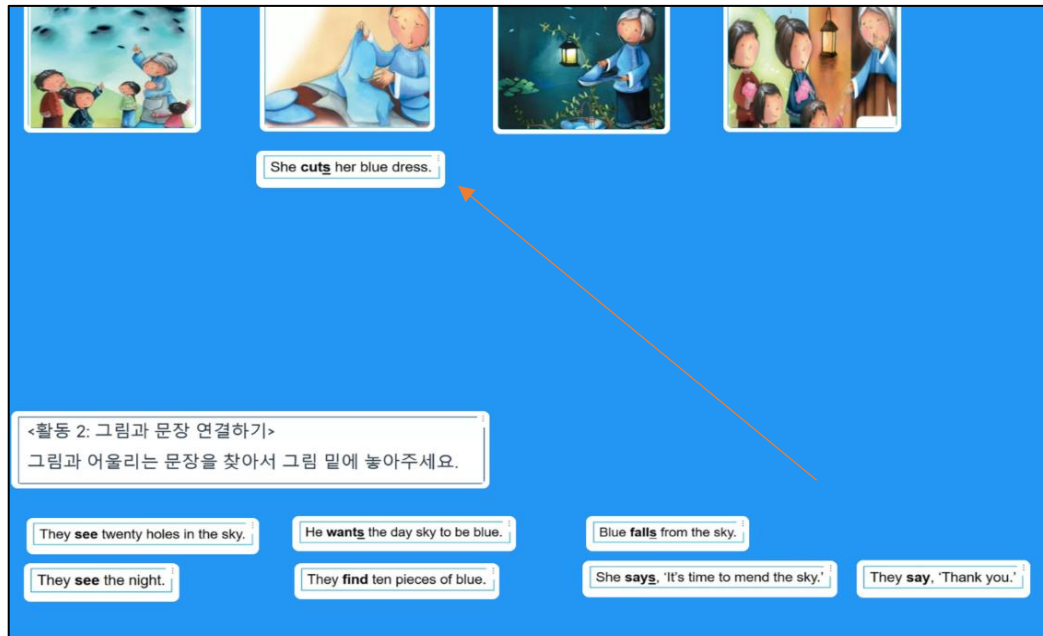


Figure 6. Sample of the Post-Reading Task

Once the students finished, they were paired so that one student was working with set A of the pictures and the other set B and in the case of triads one student with set C. Then, each pair or triad was sent to a separate breakout room and received a different Padlet link containing all set A and B sentences (and C sentences for triads). The pair/triads had to collaborate and sequence all the sentences in the correct order together. This was a two-way information gap task in that it involved students working together to reconstruct the story based on the pictures they each had from the pre-reading activity. (Figure 7). After sequencing all the sentences, the participants were asked to write a new ending for the story. So, the final outcome for all groups was a storyboard on Padlet containing eight sentences sequenced in order, an ending of the story, and a drawing if the students had time left. Lastly, the new story endings and pictures created by each pair or triad were uploaded onto the class Padlet wall. Here, the students were asked to leave comments or click ‘like’ buttons under other students’ postings (Figure 8).

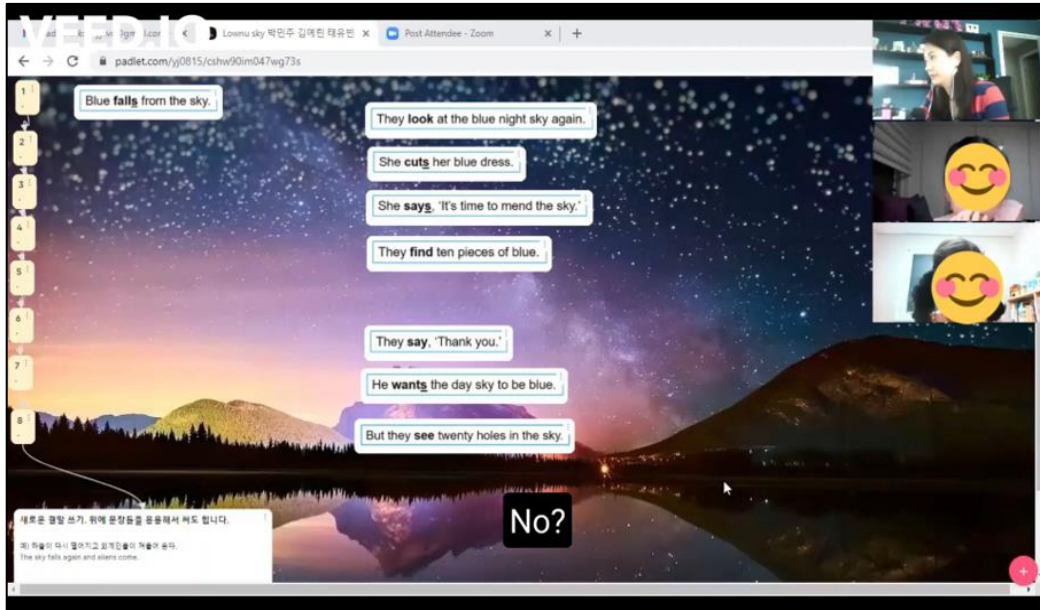


Figure 7. Sample of a Pair Completing the Post-Reading Task

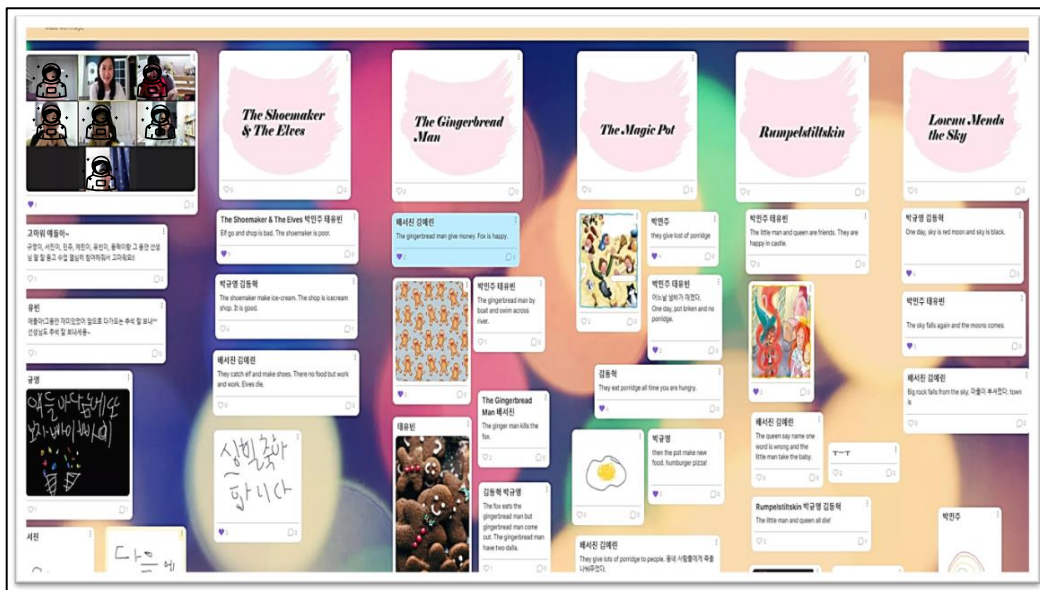


Figure 8. Sample of Class Padlet Wall

The post-reading task differed in terms of the two conditions: the presence versus absence of explicit instruction (EI). For the + EI conditions, explicit instruction about the target form was provided before performing the post-reading task (Figure 9). The researcher provided a short grammar lesson about the third person -s using a power point slide with an explanation written in the participants' L1 followed by some examples. To ensure that no

additional tokens of the target construction were given to the +EI groups in the input, the word ‘verb’ was written in Korean instead of an actual verb alongside the subject pronouns (e.g., She/He 동사-s) in all the examples given. The explicit instruction was delivered in the participants’ L1 and typically lasted two to three minutes. For the -EI condition, participants completed the post-reading task without any explicit instruction. While the +EI group was receiving explicit instruction, the -EI group were asked to wait in their respective breakout rooms until further notice by the teacher.

문장이 he, she, it, 사물, 이름으로 시작할 경우 동사 끝에 -s를 붙인다.
(After he, she, it, objects or names we add -s to the verb)

He/She/It/Name + 동사 + s

예시 (Examples):
He 동사s to the park.
She 동사s to the park.
It 동사s to the park.
Jennie 동사s to the park.

Figure 9. Slide Used for Explicit Instruction Group

4.2.7. Pilot Study

The pilot study was conducted online using Zoom and a software called SMART Learning Suite. In order to record each pair separately and to make monitoring more efficient while students were in breakout rooms, three laptops and three different Zoom IDs were set up. Six participants, four females and two males, participated in the pilot study. The students were similar to the target population of the main study in terms of age, proficiency, and school location. Two pairs were assigned to the +EI group and one pair to the -EI group, and

they participated in two data collection sessions. On the first day, students completed the pre-tests, read a story, and completed reading comprehension questions. Next, each pair was sent to separate breakout rooms and completed a post-reading task using SMART Learning Suite. The students were video recorded while performing the task using a function embedded in Zoom. Those in the +EI group also received explicit instruction on the target feature before performing the post-reading task. On the second day, students read another story, and completed a post-reading task. Then, the post-tests were administered.

This pilot provided useful information about the choice of software and tools to use. Although the software was designed for children, SMART Learning Suite was found to be too complicated for the participants, possibly because the layout was unfamiliar. Hence, the students were focusing too much on trying to use the software and failed to engage in any meaningful LREs. Therefore, the software was replaced with Padlet, a platform more familiar to Korean children. Additionally, the pilot revealed that the voices of other participants were being recorded while students were in breakout rooms because I was using three different laptops. If I muted the sound, Zoom would not record voices at all so the solution was to install separate microphones with an on/off switch and earphones to each laptop. In order to test whether the alternative solutions worked, another pilot was conducted with the same participants but using a different story. This confirmed that Padlet was much simpler to use, but as a precautionary measure I decided to meet the participants of the main study in advance to check if everyone could access Padlet and had good internet connection.

4.2.8. Assessment Tasks

4.2.8.1. Reading Proficiency Test

The reading section of the TOEFL Primary test Step 2 was used to determine whether there were any initial differences in reading ability among the two groups. This was the same

test used in Study 1 and it consisted of 37 multiple-choice questions. The participants were given 30 minutes to complete the test.

4.2.8.2. Reading Comprehension Questions

In order to examine the participants' understanding of the texts, True or False reading comprehension questions were designed by the researcher using Microsoft Forms. Six questions were constructed for each book. The students had to decide whether statements were true or false based on the story they had read (see Appendix F). Immediately after each reading, a link to the questions was given to the students and they had five minutes to complete them. As was the case in Study 1, no feedback was given on their responses. Finally, the reliability of the reading comprehension questions was evaluated using Cronbach's alpha (See Section 4.3.1). The tests were found to have low reliability possibly due to ceiling effects. As the descriptive statistics for the tests will show in the Results section (see Table 19), the mean scores for the tests were high, almost reaching the maximum score, which indicates that the participants comprehended the content of the stories without difficulty. For the purposes of the present study, this created a favourable condition for the participants, as it suggests that the students were likely to have attentional resources left to process linguistic forms (Skehan, 1998; VanPatten, 1996).

4.2.8.3. Grammaticality Judgement Test (GJT)

An untimed GJT was administered using Microsoft Forms to measure changes in the participants' declarative knowledge of the third-person *-s* before and after treatment as well as two weeks after treatment. The same GJT as Study 1 was used and three different versions were designed. The reliability of all three versions were measured using Cronbach's alpha and they were found to be acceptable (see Section 4.3.1).

4.2.8.4. Writing Test

In order to measure the participants' procedural knowledge of the third person *-s*, a writing test was administered as a pre-, post-, and delayed post-test. The test had nine different pictures illustrating a sequence of everyday routines such as waking up in the morning, eating lunch and playing football. Under each picture was a sentence starting with either a singular or plural subject pronoun with the rest left blank. The participants had to complete the sentence to describe the action taking place. In total there were 3 sentences starting with the pronoun 'he', 3 sentences with 'she', and 3 sentences with 'they'. To ensure that the test elicited the target form, it was piloted on 5 children (3 females, 2 males) who had English as their first language (L1). After piloting, it was found that the past tense was sometimes used. Therefore, to avoid eliciting other tenses, adverbs of frequency such as 'always' and phrases such as 'every morning' were occasionally placed after the pronoun to signal the use of the present simple tense. The revised test was piloted again on the same L1 English children and six EFL Korean children (4 females, 2 males) and was found to successfully elicit the target form. Three versions of the writing test were designed, and the reliability of the tests were good (see Section 4.3.1).

4.2.9. Data Collection Procedure

Data was collected over 8 weeks and ran from May to July. The study took place two times a week, on Tuesdays and Thursdays as part of the school's extracurricular English class. On day one, the participants took the TOEFL Primary test. On day two, the writing test was administered first and then the GJT as pretests. From day three to nine, the participants engaged in seven treatment sessions with each session lasting 50 minutes. During each session, the participants received individual links to the pre-reading activity and were given five minutes to complete it. Then, the storybook was read to the participants. Immediately

after reading, the students were given a link to the reading comprehension questions and were asked to complete it in five minutes. Next, the participants engaged in their respective post-reading task with the +EI group receiving explicit explanation about the target form before performing the task. The post-reading task took approximately 20 minutes. On day ten, the writing test and GJT were administered as post-tests and two weeks later the two tests were taken again by the students as a delayed posttest.

4.2.10. Scoring and Data Analysis

4.2.10.1. Scoring

4.2.10.1.1. TOEFL Primary Test

The reading section of the TOEFL Primary test included 37 questions. Following the TOEFL Primary scoring guidelines, the test was scored dichotomously by awarding one point for each correct answer, resulting in a total score of 37.

4.2.10.1.2. Reading Comprehension Questions

Study 2 administered seven sets of reading comprehension questions, one set for each storybook. The reading comprehension questions were combined and scored dichotomously. One point was given for each correct answer resulting in a total score of 42.

4.2.10.1.3. Grammaticality Judgement Test

The GJT included 48 items of which 16 items were target items. One point was awarded for each correct response and 0 points for maybe and incorrect responses. Hence, the maximum score was 16.

4.2.10.1.4. Writing Test

The writing test included 9 items. A score of 1 was given for correct responses and 0 points for incorrect and no responses. It should be noted that no points were allocated if different tenses were used, such as the present progressive or past tense. Thus, the total score was 9.

4.2.10.1.5. Writing Component of the Post-Reading Task

Suppliance in Obligatory Contexts (SOC) was used to score the participants' writing of new endings for each story. Following Dulay and Burt (1974) and Pica (1983), if a pair/triad produced a sentence such as 'The troll sees the boat,' they have created an obligatory context for using the third person *-s*. The context was then scored according to whether the singular *-s* morpheme was correctly supplied (1 point), or no morpheme was supplied (0 points). Also, if the writing started off in the present simple tense, all following sentences beginning with a singular noun or pronoun were considered obligatory contexts. Hence, if the main verb in these sentences were written in a different tense, for example in the past tense, zero points were given. Lastly, sentences with the three auxiliary verbs *be*, *do*, and *have* used as main verbs were not included in the analysis. Table 12 provides examples of the scoring system.

Table 11. Scoring System for Target Form

1 point	Correct use of the third person singular <i>-s</i> e.g., The gingerbread man <i>spits</i> fox had.
0 points	Omission of the third person singular <i>-s</i> e.g., The fox <i>swim</i> across the river.
	Use of different tenses after starting paragraph in the present simple tense e.g., The gingerbread man <i>spits</i> fox had. And the gingerbread man <i>crossed</i> to next ground.

Initially, the analysis was going to include both omission and overuse of the third person singular -s. However, it was found that there were no instances of the morpheme being incorrectly added to the main verb. Thus, obligatory contexts were scored dichotomously. After scoring each context, the score values were added. Then, the sum was divided by the total number of obligatory contexts. The formula for SOC analysis is given below.

$$\text{SOC} = \frac{\text{Number of correct suppliance in obligatory contexts}}{\text{Total obligatory contexts}}$$

4.2.10.1.5. Coding of Language Related Episodes

The participants' conversational interactions during the collaborative part of the post-reading task were transcribed verbatim, and the total number of LREs that occurred for each group was tallied. Specifically, 35 hours of talk were transcribed and coded for LREs. Following García Mayo and Azkarai (2016), an LRE started when a participant raised a question about language and ended when they either continued with the task at hand or moved on to a new discussion topic. Then, once the LREs had been identified, they were coded according to three main categories: the linguistic focus and the outcome of LREs and the level of engagement in LREs. The linguistic focus of LREs was subdivided into two types: (1) meaning-focused, which included instances where the learners dealt with word meaning and/or word choice; and (2) form-focused, which involved episodes concerning phonology, spelling, morphology, and/or syntax. Next, the outcome of LREs was coded based on whether they were resolved or unresolved. Finally, based on previous research (García Mayo and Azkarai, 2016; Storch, 2008; Storch & Wigglesworth, 2010), a further distinction was made between LREs that showed elaborate engagement and those showing

limited or no engagement. More specifically, LREs were coded according to three types of level of engagement: (1) elaborate engagement if all members of the group were engaged in resolving the linguistic issue, (2) limited engagement if only the participant who initiated the LRE was engaged in addressing the issue and others were not joining in, and (3) limited + limited engagement if no one in the group discussed the linguistic issue raised and moved on with the task. Each LRE dealt with only one linguistic item. If the same LRE was deliberated in several turns throughout a single conversation, the linguistic focus and outcome of that LRE was coded only once.

The following examples illustrate how LREs were coded according to linguistic focus, outcome, and level of engagement. In Example (1), students A and B are writing a new ending for the story they read that day. After student B writes a sentence, student A tells student B that he has spelt the word ‘dumpling’ incorrectly (turn 1). However, student B disagrees with student A (turn 2). In turn 3, student A types in the correct spelling on the Padlet page they are working on, and the issue is resolved correctly. This conversation was coded as a form-focused LRE since it dealt with spelling, and as showing elaborate engagement since both participants were actively engaged.

- (1) 1. Student A: 이거 덤플링이야. 너 덤핑이라고 썼어.
 (iego dumpling-iya. Neo dumping-ilago sseoss-eo)
 [This is a ‘dumpling’. You wrote ‘dumping’]
2. Student B: 이렇게 쓰는거 맞는거 같은데?
 (ileohge sseuneungeo majneungeo gat-eunde?)
 [I think this is how you spell it]
3. Student A: 아니야. 덤플링이라고 써야지. 내가 써줄게. 보여?
 (aniya dumpling-ilago sseoyaji naega sseojulge boyeo?)
 [No, you need to write ‘dumpling.’ Let me type it in for you. Can you see it?]
4. Student B: (nods)

Example (2) shows a meaning-focused LRE, specifically focusing on word choice. While writing the story ending, student A asks student B how to write something in English (turn 1). Student B tries to form a sentence (turn 2) when student A joins in by providing the verb ‘sell’ (turn 3). This LRE was coded as an incorrectly resolved LRE and as showing elaborate engagement.

(2) 1. Student A: 장사가 잘 안됐다를 어떻게 쓰지?

(jangsaga jal andwaessda-leul eotteohge sseuji?)
[How do you say the business didn’t do well?]

2. Student B: They don’t...

3. Student A: Sell?

4. Student B: 응. (He writes ‘They don’t sell.’) 끝났다 이제!
(eung. kkeutnassda ije!)
[Yes. We’ve finished now!]

In Example (3) student A asks for the spelling of ‘change’ (turn 1), student B ignores the question and talks about what he wants to write next (turn 2). In turn 3, student A guesses the spelling of ‘change’ and writes down the two words ‘star’ and ‘moon’ suggested by student B. Then, Student A asks his partner if his sentence is correct, but student B does not respond. Student A waits very briefly and then continues with the task (turn 5). This LRE was classified as an unresolved form-focused LRE, specifically centred on spelling, and coded as limited engagement since only the participant who raised the linguistic issue actively engaged in trying to resolve it.

(3) 1. Student A: ‘Change’ 어떻게 써?

(‘Change’ eotteohge sseo?)
[How do you spell ‘change?]

2. Student B: Star and moon...

3. Student A: (writes ‘change’ incorrectly) Star, moon. (writes ‘star’ and ‘moon’)
이거 맞아?
(igeo maja?)

[Is this right?]

4. Student B: (silence)

5. Student A: Night. Last night... (continues to write on his own)

Lastly, Example (4) shows a conversation with two LREs. According to Swain and Lapkin (1998), one larger LRE can have smaller ones embedded in it. These smaller LREs were coded separately. Hence, turns 1 to 2 were coded as a meaning-focused correctly resolved LRE with elaborate engagement, and turns 3 to 5 were coded as a form-focused unresolved LRE with limited engagement.

(4) 1. Student A: The little man and the queen... Is friends now 라고 쓰면 되?

(Is friends now lago sseumyeon doe?)

[Do I write, 'Is friends now?']

2. Student B: Became friends?

3. Student A: 아 그래! 그게 낫겠다. 'Became' 어떻게 써?

(ah geulae! geuge nasgessda. Became eotteohge sseo?)

[Oh, yes! That sounds better. How do you spell 'became'?]

4. Student B: 몰라. 그걸 내가 어떻게 아니?

(molla geugeol naega eotteohge ani?)

[I don't know. How should I know?]

5. Student A: 알았어. (She writes 'become')

(al-ass-eo) [Okay]

After all the LREs were identified and classified according to their linguistic focus, outcome, and level of engagement, the data were tallied.

4.2.11. Statistical Analyses

As a preliminary step, Mann-Whitney *U* tests were conducted to compare the participants' performance under the +EI and -EI conditions on the reading component of the

TOEFL Primary Test and the two pretests, as the participants' scores across the two conditions did not meet the normality assumption. To address the two research questions, Mann-Whitney *U* tests were conducted given the nonparametric distributions of data. An alpha level of .05 was set as the criterion for significance. To measure effect sizes, *r* values were computed for the Mann-Whitney *U* tests. Following Plonsky and Oswald (2014), *r* values of .25, .40, and .60 were considered as small, medium, and large, respectively.

4.3. Analyses and Results

4.3.1. Preliminary Analyses

4.3.1.1. Internal Consistency Reliability

Table 13 presents a summary of the reliability statistics for the TOEFL Primary test, the three versions of the grammaticality judgement test and writing test, and the seven sets of reading comprehension questions. Cronbach's alpha for some of the reading comprehension questions was found to be relatively low (<.60). This may have been due to each test only consisting of six question items thus resulting in low internal consistency.

Table 12. Internal Consistency Reliability

	N	M	SD	α
TOEFL Primary Test – Reading	33	22.06	6.11	.83
Grammaticality Judgement Test – A	33	7.86	3.63	.76
Grammaticality Judgement Test -B	33	7.69	3.15	.67
Grammaticality Judgement Test -C	33	7.80	2.48	.63
Writing Test – A	33	2.58	1.84	.75
Writing Test – B	33	2.49	2.19	.80
Writing Test – C	33	1.96	2.36	.85
Reading Comprehension Questions – Book 1	33	4.52	1.40	.55
Reading Comprehension Questions – Book 2	33	4.55	1.50	.63
Reading Comprehension Questions – Book 3	33	4.91	1.47	.72
Reading Comprehension Questions – Book 4	33	4.88	1.32	.56
Reading Comprehension Questions – Book 5	33	4.91	1.55	.75
Reading Comprehension Questions – Book 6	33	4.33	1.69	.70
Reading Comprehension Questions – Book 7	33	4.64	1.41	.59

TOEFL Test: Max. = 37; Grammaticality Judgement Test: Max. = 16; Writing Test: Max. = 9; Reading Comprehension Questions: Max. = 6

4.3.1.2. Comparability of the Groups

Table 14 summarizes the descriptive statistics for each group’s performance on the pre-tests for the TOEFL Primary test, grammaticality judgement test and writing test. Since the data did not meet the assumption of normality, Mann-Whitney *U* tests were conducted to investigate whether there were differences among the two groups at the time of the pre-test. The results showed no significant differences on the TOEFL Primary test $U = 119.50, z = -.60, p = .56, r = .10$, the grammaticality judgement test $U = 111.50, z = -.90, p = .38, r = .16$, and the writing test $U = 91.50, z = -1.65, p = .11, r = .29$. Hence, the two groups were considered comparable at the outset of the study.

Table 13. Descriptive Statistics for the Three Pretests

		N	Mean	Median	IQR
TOEFL Primary	+EI	17	21.47	23.00	10
	-EI	16	22.69	22.50	10
GJT	+EI	17	6.41	7.00	3
	-EI	16	6.94	7.00	4
Writing Test	+EI	17	1.29	1.00	2
	-EI	16	2.13	2.50	2

TOEFL Primary Test: Max. = 37; Grammaticality Judgement Test: Max. = 16; Writing Test: Max. = 9

4.3.2. Effects of explicit instruction prior to performing a post-reading task on L2

grammar development

To examine the extent to which providing explicit instruction before engaging in a post-reading task facilitated the development of the target form and thereby address research question 1, the +EI group and -EI group’s gain scores on the pretest, posttest, and delayed posttest were compared for the GJT and writing test. Additionally, the use of the third person

singular -s in the story endings written by both groups as part of the post-reading tasks were compared.

4.3.2.1. Grammaticality Judgement Test (GJT)

As the descriptive statistics show in Table 15 and Figure 10, both groups exhibited pretest-posttest gains with the -EI group showing higher gain scores. On the delayed posttest, further gains were observed by the +EI group whereas a minimal drop in score can be seen for the -EI group in comparison to the posttest. In order to examine whether there were any significant differences between the two groups' pretest-posttest and pretest-delayed posttest gains on the GJT, a pair of Mann Whitney *U* tests was conducted on the participants' gain scores as the data did not meet the normality assumption. However, no significant differences were found for either the pre-test to post-test gains $U = 133.00, z = -.11, p = .93, r = .02$ or pre-test to delayed post-test gains $U = 108.50, z = -.10, p = .33, r = .02$.

Table 14. Descriptive Statistics for Scores on the GJT

Groups	Pre-test			Post-test			Delayed Post-test		
	Mean	Median	IQR	Mean	Median	IQR	Mean	Median	IQR
+ EI (n=17)	6.41	7.00	3	7.41	6.00	4	8.12	8.00	6
- EI (n=16)	6.94	6.00	4	8.00	8.00	3	7.63	7.00	4

* Maximum score 16

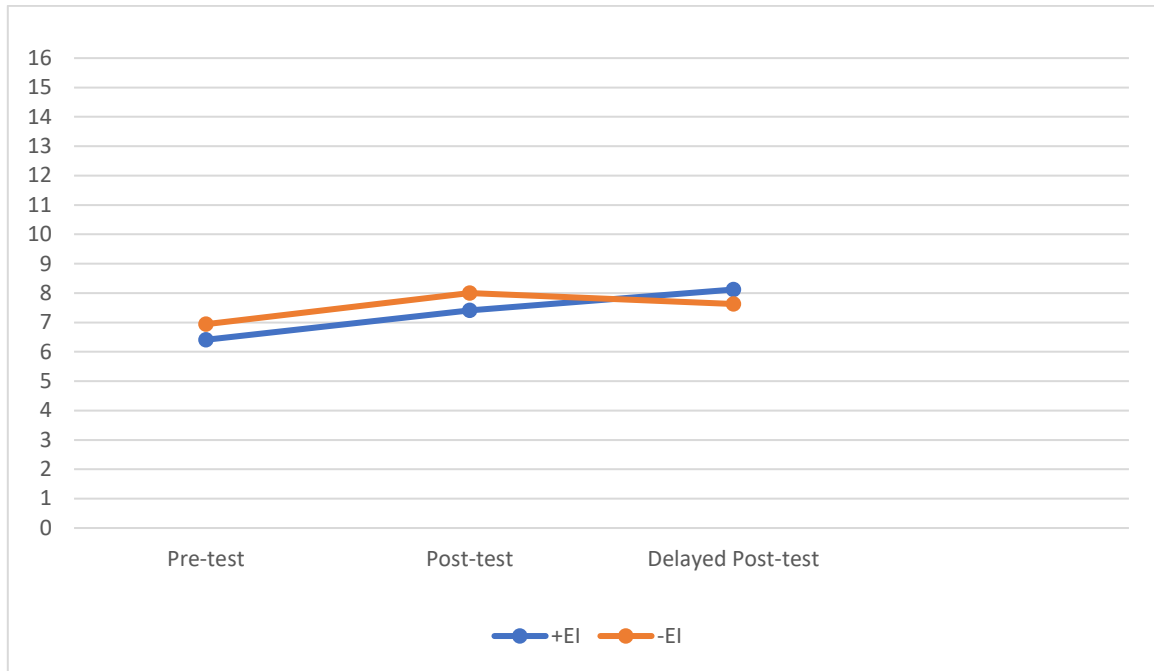


Figure 10. Mean Scores for +EI and -EI on the GJT

4.3.2.2. Writing Test

Table 16 and Figure 11 present the descriptive statistics for the writing test scores. The +EI group showed more improvement from the pre-to post-test compared to the -EI group. Also, the gains made by the +EI group were maintained until the delayed post-test. In order to determine whether these differences were significant, a Mann Whitney U test was run on the participants' pretest-posttest and pretest-delayed posttest gain scores. The results showed that the +EI group achieved greater development from the pre-test to the posttest $U = 82.50, z = -2.03, p = .05$ and pre-test to the delayed posttest $U = 82.50, z = -1.98, p = .05$ than the -EI group. The effect sizes were in the medium to small range, $r = .49$ and $r = .25$ respectively.

Table 15. Descriptive Statistics for Scores on the Writing Test

Groups	Pre-test			Post-test			Delayed Post-test		
	Mean	Median	IQR	Mean	Median	IQR	Mean	Median	IQR
+ EI (n=17)	1.29	1.00	2	2.35	2.00	2	2.29	2.00	3
- EI (n=16)	2.13	2.50	2	2.31	2.50	2	1.81	1.50	3

* Maximum score 9

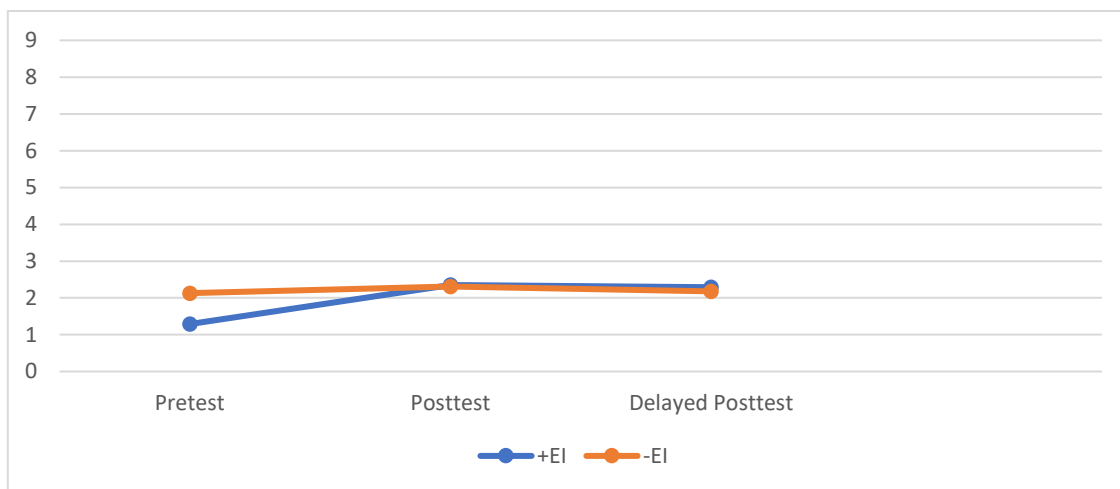


Figure 11. Mean Scores for +EI and -EI on the Writing Test

4.3.2.3. The writing component of the post-reading task

Table 17 displays the raw frequencies for suppliance, obligatory contexts, and the percentages of suppliance in obligatory contexts for the target third person *-s* form according to group condition. Each pair/triad's score is based on the seven new story endings they produced during the study as part of the post-reading task. As the group scores indicate, the +EI group supplied the third person singular *-s* in obligatory contexts more frequently than the -EI group when they finished their stories.

Table 16. Raw Frequencies of Suppliance, Obligatory Contexts and Percentages of Suppliance of Obligatory Contexts by Group

Group	Supplied n	Obligatory Context N	SOC
+EI:			
Pair 1	3	8	38%
Pair 2	5	6	83%
Pair 3	0	0	0%
Pair 4	4	7	57%
Pair 5	5	6	83%
Pair 6	1	3	33%

Pair 7	6	6	100%
Pair 8	0	2	0%
Average	3	4.75	49.25%
-EI			
Pair 1	0	0	0%
Pair 2	0	1	0%
Pair 3	2	5	40%
Pair 4	0	8	0%
Pair 5	0	11	0%
Pair 6	2	6	33%
Pair 7	4	4	100%
Average	1.14	5	24.71%

In order to examine the communicative aspects of the participants' performance, following Kuiken and Vedder (2017), the new story endings produced by each pair were analyzed in terms of functional adequacy. Each story ending was scored on a 6-point Likert scale. Among the four dimensions in Kuiken and Vedder's original rating scale, only Content, Task Requirement, and Comprehensibility were used. The dimension Coherence and Cohesion was excluded because the writings produced by the participants were very short, comprising of one or two sentences. The dimension Content assessed the number of ideas present in the writing and whether those ideas were coherent. Task Requirement was rated according to whether the writing successfully fulfilled all task requirements (i.e., writing an alternative ending). Lastly, Comprehensibility assessed how much effort was required to understand the ideas in the writings. (see Appendix G for rating scale). As Table 18 demonstrates, the -EI group showed relatively higher mean scores on all dimensions compared to the +EI group.

Table 17. Descriptive Statistics for Scores on Functional Adequacy

Dimension	+EI (n=8 pairs/triads)		-EI (7 pairs/triads)	
	Mean	SD	Mean	SD
Content	1.68	1.74	2.29	1.88

Task Requirement	2.20	2.13	2.67	2.27
Comprehensibility	2.05	1.92	2.43	1.90

* Maximum score for each dimension is 6

4.3.2.4. Reading Comprehension Questions

The descriptive statistics for the reading comprehension questions data appear in Table 19 (See Section 4.3.1. for internal consistency). As the overall scores indicate, the participants displayed a good understanding of the graded readers regardless of whether they received explicit instruction or not before the post-reading tasks. A Mann-Whitney *U* test confirmed that there was no significant difference between the two groups in terms of reading comprehension throughout the experiment, $U = 172.50$, $z = 1.32$, $p = .19$, $r = 0.23$. The effect size was in the small range. In other words, the presence or absence of explicit instruction had no significant impact on the participants' overall reading comprehension scores.

Table 18. Descriptive Statistics for Reading Comprehension Questions by Group

Group	<i>n</i>	Mean	Median	SD	95% CI	
					Lower	Upper
+EI	17	31.18	29.00	8.38	26.87	35.48
-EI	16	34.38	37.00	8.39	29.90	38.85

* Maximum score 42

4.3.3. Effects of post-task explicit instruction on the number, linguistic focus, outcome, of language related episodes and the level of engagement in language related episodes

Research question 2 asked the extent to which providing explicit instruction before engaging in post-reading tasks would affect the subsequent occurrence of language-related episodes. Table 20 shows the number and linguistic focus of LREs produced by the 15 pairs/triads. Their interaction contained a total of 51 LREs. Although the overall number of

LREs was low, form-focused LREs occurred more often ($n = 35$; 69%) than meaning-focused LREs ($n = 16$, 31%).

Table 19. LREs by Linguistic Focus

LRE Type	n (%)	Mean	SD
Form-focused	35 (69%)	2.33	2.72
Meaning-focused	16 (31%)	1.07	1.49
Total	51	3.40	2.90

Table 21 provides the number, linguistic focus, and outcome of LREs produced by the pairs/triads in the two conditions: +EI ($n = 8$) and -EI ($n = 7$). In order to account for the unequal number of participants in each condition, the percentage of LREs by condition is provided in brackets.

Table 20. Number, Linguistic Focus, and Outcome of LREs by Group

LRE Type	Correct		Incorrect		Unresolved		Total	
	+EI	-EI	+EI	-EI	+EI	-EI	+EI	-EI
<i>Meaning-focused</i>								
Word choice	0	6	1	4	2	1	3 (19%)	11 (81%)
Word Meaning	0	1	0	0	0	1	0 (0%)	2 (100%)
<i>Form-focused</i>								
Spelling	4	12	1	2	3	2	8 (30%)	16 (70%)
Morphosyntax	2	3	3	1	0	2	5 (42%)	6 (58%)
Total	6	22	5	7	5	6	16	35

Overall, the -EI group produced more LREs than those in the +EI group across all categories. In terms of the target structure, only a small number of LREs occurred for both groups. The +EI group produced three LREs involving the third person singular, of which two were resolved correctly and one incorrectly. In the -EI group, two LREs related to the target form were produced of which one was resolved correctly and one left unresolved. The findings so far seem to suggest that both +EI and -EI groups do focus on form but largely on spelling.

Table 22 presents the level of engagement in LREs for both groups. In general, the LREs produced by both groups were elaborate. However, the -EI group produced a higher percentage of elaborate LREs compared to the +EI group.

Table 21. Level of Engagement by Group

Group	Elaborate LREs	Limited LREs	Limited-Limited LREs
+EI	9 (56.26%)	4 (25%)	3 (18.75%)
-EI	27 (79.41%)	3 (8.82%)	4 (11.76%)

4.3.4. Summary of Results

RQ1: To what extent does explicit instruction prior to performing a post-reading task with textual enhancement affect the acquisition of third person singular –s among child EFL learners?

The results revealed that providing explicit grammar explanation before performing the post-reading task had a greater positive effect on participants' procedural knowledge of the third person -s than providing no explicit instruction. The +EI group displayed significantly higher gains on both the pretest-posttest and pretest-delayed posttest compared to the -EI group on the writing test, designed to assess learners' procedural knowledge, with a medium effect size. However, no significant differences were found between the two groups on the grammaticality judgement test, included to tap learners' declarative knowledge of the target form. Additionally, providing explicit instruction was found to facilitate the +EI group in supplying the target form in obligatory contexts when writing new endings for the stories.

RQ2: To what extent does post-task explicit instruction affect the number, linguistic focus, outcome, and level of engagement of LREs?

Although the overall instances of LREs were low, form-focused LREs, specifically those focusing on spelling, were generated the most by the participants. Also, most of the LREs were found to be elaborate LREs. In terms of LREs related to the target construction, only a small number of them were generated by both groups.

4.4. Interim Discussion

To extend study 1, this study further examined the effects of post-reading tasks with textual enhancement on promoting L2 grammatical knowledge by including explicit instruction prior to task performance. Another goal of the present study was to explore the extent to which providing explicit grammar instruction generated language related episodes and if such episodes contributed to L2 grammar development. Study 2 differed from Study 1 in that: (a) it included a group which received explicit grammar instruction before performing the post-reading task, (b) it examined the occurrence of language related episodes during task performance, (c) it included a written production test, and (d) a delayed post-test was administered.

4.4.1. Effects of Explicit Instruction Prior to Performing a Post-Reading Task with Textual Enhancement on the Acquisition of the Third Person Singular -s

The first research question asked the extent to which providing explicit instruction before engaging in a post-reading task affects the acquisition of third person singular *-s*. The results revealed that textual enhancement accompanied with explicit instruction was significantly more effective than textual enhancement alone in developing participants' knowledge of the target form as reflected in participants' performance on a writing test, and the effect was retained after two weeks. However, no significant effects of explicit instruction

were found for improving declarative knowledge as measured by a grammaticality judgement test. Importantly, the presence versus absence of explicit instruction did not interfere with reading comprehension. These findings generally align with previous studies that yielded more positive effects of providing explicit instruction with textual enhancement compared to textual enhancement alone (e.g., Alanen, 1995; Indrarathne & Kormos, 2017; Leow & Martin, 2018; Shook, 1994). According to Indrarathne and Kormos' (2017) eye-tracking study, the combination of textual enhancement and explicit rule presentation may increase attention to target forms and thereby lead to learning gains. It is plausible that the explicit instruction given in this study also encouraged participants to process the enhanced target forms more robustly, although this can only be speculated since no process data was collected in the form of eye-tracking or verbal protocols.

A question to first address is why the positive impact of textual enhancement was only observed on the writing test and not the GJT. This is an interesting finding since one would expect explicit instruction to promote declarative knowledge. It is plausible that such results are related to the uniqueness of child SLA. According to Paradis (2004), young children still rely on procedural knowledge, and declarative memory becomes stronger during the course of development. Further, it is claimed that children are able to create grammatical rules without declarative and metalinguistic knowledge. Indeed, some studies suggest that, like L1 learners, L2 learners can use their procedural memory in language acquisition and acquire grammar without declarative rules (e.g., Krashen, 1982; Meisel et al., 1981). Hence, it may have been possible that the child participants of the current study were able to develop procedural knowledge of the target form without establishing declarative knowledge.

Alternatively, a possible explanation is that since the writing test was untimed, it may have allowed participants to draw on their declarative knowledge. Additionally, the principle of transfer-appropriate processing may offer an explanation for this finding. According to this

principle, the greater the similarity between the cognitive processes engaged in during learning and those engaged in during retrieval, the more likely that learners will remember what they have learned (Lightbown, 2007). In light of this view, the participants might have performed better on the writing test since it required them to engage in processes similar to those that were active during the treatment. The writing test and post-reading tasks were similar in that they both involved pictures describing a series of events and required learners to write sentences. Hence, the participants may have engaged in similar syntactic processes during both tasks.

The effectiveness of providing explicit instruction prior to post-reading tasks on developing procedural knowledge of the third person singular *-s* may be explained by Skill Acquisition Theory. According to this theory, for proceduralization (i.e., knowledge how) to take place, solid and accurate declarative knowledge (i.e., knowledge that) must exist alongside plenty of practice. The participants in the +EI group were given repeated explicit grammar lessons on the third person singular *-s* right before performing the post-reading tasks over seven treatment sessions. Additionally, the post-reading task was designed not only to direct the participants' attention to enhanced exemplars of the target form but to the meaning of the story as well. The stories used in this study were selected in such a way that they contained a considerable number of the third person singular *-s*. Therefore, completing the post-reading task after establishing declarative knowledge of the target form may have provided opportunities to draw on and apply their declarative knowledge on a regular basis, thus facilitating the proceduralization of the target feature.

Another possibility is that the combination of extensive input alongside explicit instruction may have promoted implicit and/or explicit tallying of the target form. The participants in this study were not only exposed to enhanced versions of the target form in the post-task stage but they also encountered non-enhanced exemplars in the during-task stage

while reading the storybooks. Once the form-meaning mapping had been established as a representation through explicit instruction, the participants in the +EI group may have engaged in explicit and/or implicit tallying of the construction during both the post-task and during-task stage. Further, it has been argued that explicit rule presentation may only be fully effective when demonstrated together with sufficient exemplars of their application (Marsden, 2006; N. Ellis, 2002; VanPatten & Oikarinen, 1996). Hence, reading a story and performing tasks that illustrate examples of using the third person -s may have given a boost to the effects of explicit instruction.

The nature of the target form could be another factor that might account for the favourable effects of explicit instruction. According to Farley (2004), it may be more difficult to induce form-meaning connections with ‘opaque’ features, and explicit instruction may assist learners to identify the connection more quickly. Given that the third person singular -s is a non-salient, redundant linguistic cue prone to blocking, providing explicit instruction may be more effective in facilitating participants to make the connection between the morpheme -s and third person. This aligns with previous studies which have reported null effects of textual enhancement in acquiring linguistic features with no semantic value (e.g., Leow et al. 2003; Lyndon, 2011; Wong, 2003).

Also, the participants’ prior knowledge may have mediated the effects of explicit instruction. As can be seen by their pretest scores on the GJT, the students had partial knowledge of the target form. This was also the case for participants in Alanen (1995) and Indrarathne and Kormos’ (2017) study which found superior effects of textual enhancement combined with explicit instruction. It is plausible that providing explicit instruction helped participants consolidate their partial knowledge of the target feature.

The mode of learning may have also played a role in yielding more positive findings for textual enhancement in combination with explicit grammar instruction compared to providing

no instruction. Russell (2012) suggested that in computer-based media, learners may dismiss stimuli that are perceived as uninteresting. In a similar vein, it has been argued that with the development of technology, static types of textual enhancement may have limited effects when more dynamic or animated visuals are available on the web (LaBrozzi & Villegas, 2020). Although not within the context of computer-assisted language learning (CALL), some researchers (e.g., LaBrozzi, 2016; Simard, 2009) argue that variation in number and type of typographical cues may influence the degree to which textual enhancement impacts attention and L2 acquisition. It should also be noted that the target form, third person singular *-s*, is already a non-salient feature. In light of these considerations, traditional forms of textual enhancement such as boldfacing, and underlining used in this study may not be stimulating or salient enough to capture learners' attention in video computer-mediated communication contexts. Given the scarcity of empirical research on the effects of different types of textual enhancement in the context of CALL involving child EFL learners, future studies should seek to investigate this issue to shed further light on using textual enhancement as a means to draw L2 learners' attention in online instructional settings.

The durability of the effectiveness of explicit instruction after two weeks runs counter to previous claims that the effectiveness of explicit instruction tends to gradually deteriorate over time (e.g., Lado et al., 2014; Stafford et al., 2012; Tode, 2007). According to Botana and DeKeyser (2019), allowing only a single exposure to explicit instruction before treatment would mean that any benefits it may have on learning would depend on the amount of attention paid by the participants during exposure and how much of the explicit information they remember. It has also been argued that providing distributed exposure can lead to more significant and durable learning gains compared to massed practice (Rogers, 2015, 2022). In other words, distributed opportunities to practice the same material over multiple occasions has been found to contribute towards better learning and retention than intensive exposure to

the same material in a single longer session. Hence, it is plausible that providing repeated explicit instruction over multiple sessions may have contributed to the durable effects found in the current study.

4.4.2. Effects of Post-task Explicit Instruction on the Number, Linguistic Focus and Outcome of LREs and Level of Engagement of LREs

Research question two asked the extent to which explicit instruction before performing post-reading tasks would affect language-related episodes (LREs). The transcribed data of the video-recordings from the interaction that took place while participants completed the post-reading task revealed that form-focused LREs, specifically those related to spelling, were generated the most regardless of group. The linguistic focus of LREs found in this study is in line with previous studies that have reported tasks with a writing component to have a tendency to generate more form-focused LREs compared to oral tasks (e.g., García Mayo, 2002a, 2002b; García Mayo & Azkarai, 2016). The majority of LREs in this study were initiated while the participants were writing a new ending for the story. For example, if participants did not know the spelling of a specific word, they either looked for a different word (Example 5) or left it unresolved. But in most cases, they attempted to resolve the issue even though they might not have settled on the target-like form (Example 6). Also, the participants may have been unable to address some of the spelling-related problems due to their low proficiency and decided to avoid using them (Example 7).

(5) Student A: Scicers 라고 썼는데?
(‘scicers’ ligo sseossneumdae?)
[You wrote ‘scicers’]

Student B: (laughs) 너가 써봐.
(neoga sseobwa)
[You try writing it]

Student A: 근데 좀 잔인하다. 어쩔 수가 없다. 써보도록 할게. 나 scissors 를 너무 안 썼어. 음... 내가 scissors 를 너무 안 써서... (laughs)
(geunde neomu jan-inhada. eojujeol suga eobsda. sseobodolog halge. na scissors-leul neomu an sseoss-eo. umm... naega scissors-leul neomu an sseoseo...)
[It's a bit cruel. But there's nothing we can do. I'll try to write it. I haven't spelt scissors for a while. Hmm... I haven't spelt scissors for a long time...]

Student B: 잠깐만...
(jamkkanman)
[Hang on...]

Student A: 그냥 fork 에 찔려서 죽었다고 할까?
(geunyang 'fork'eue jjillyeoseo jug-eossdago halkka?)
[Shall we just say he was stabbed with a fork?]

Student B: (laughs) 여기서 fork 가 나와? 그래, 그러자.
(yeogiseo 'fork'-ga nawa? geulae geuleoja)
[Was there a fork in the story? Okay, let's write that]

(6) Student A: 배를 영어로 뭐라고 하지?
(baeleul yeong-eolo mwolago haji?)
[How do you say 'stomach' in English?]

Student B: 배가 뭐지? 갑자기 생각이 안나. Stomach?
(baega mwoji? gabjagi saeng-gag-i anna. Stomach?)
[What's stomach? I suddenly can't remember. Stomach?]

Student A: 스펠링이 뭐야?
(spelling-i mwoya)
[How do you spell that?]

Student B: S-T-O-M-A-C

(7) Student A: Actually 어떻게 써?
(‘actually’ eotteohge sseo?)

[How do you spell 'actually'?)

Student B: **Actually?**

Student A: 어, 나 쓸줄 몰라.

(eo na sseuljul molla)

[Yeah, I don't know how to write it]

Student B: **A-C...**

Student B: **잠깐만...** (starts typing)

(jamkkanman)

[Wait]

Student A: **C-C 쓴 다음에... 아, 나도 모르겠어!**

(C-C-sseun da-eum-e... ah, nado moleugess-eo!)

[C-C. Then... Ah, I don't know either!]

Student B: **그냥 쓰지말자 그럼.**

(geunyang sseujimalja geuleom)

[Let's just not use it then]

As a reason for why most LREs were produced while writing new endings to the story, it can be speculated that since the participants had to post their final written product on the class Padlet wall at the end of each session, they may have felt more pressure to correct errors. Also, writing an alternative ending may have pushed learners to reflect upon their linguistic output, moving from semantic processing to more syntactic processing (Swain, 1995, 2000). That is, in producing language, the participants may have discovered a gap in their knowledge, which could have triggered an analysis of the input (i.e., syntactic analysis) and generate more LREs in order to fill this gap (Kowal & Swain, 1994).

For both groups, however, only a small number of LREs were related to the target form. One reason for this may be the nature of the task with the students focusing primarily on meaning. Participants were told that the goal of the task was to sequence the pictures in

the correct order and to come up with a novel ending to the story. This is an important finding as providing explicit instruction did not disturb the interaction or compromise the primacy of meaning, which is a concern raised by many critics of incorporating focus on form within a task-based lesson (e.g., Ellis et al., 2019; Van de Guchte et al., 2019).

An interesting finding of the current study is that the -EI group generated significantly more LREs across all categories compared to the +EI group. Also, a high number of LREs produced by the -EI group showed elaborate engagement. As mentioned in the Results section, the scores regarding the functional dimensions of the participants' written new story endings showed that the -EI group achieved higher mean scores on all dimensions compared to the +EI group (Content: +EI Mean 1.68 vs. -EI Mean 2.29; Task requirement: +EI Mean 2.20 vs. -EI Mean 2.67; Comprehensibility: +EI Mean 2.05 vs. -EI Mean 2.43; Maximum score for each dimension is 6). In light of these findings, it may have been possible that providing explicit instruction to the +EI group resulted in a small trade-off between focusing on form and the functional aspects of task performance. This may have led the +EI group to engage in fewer LREs compared to the -EI group. Nevertheless, only three incidences of LREs were observed regarding the target form, and the video-recorded data showed no occasions where the participants discussed the explicit instruction given. This seems to suggest that providing explicit instruction did not compromise the meaning-primary principle of TBLT.

An explanation for the overall low incidence of LREs may be due to the participants' low proficiency level. Previous research has demonstrated that the frequency of LREs increases with proficiency in the L2 (e.g., Kim & McDonough, 2008; Leiser, 2004; Williams, 2001). It is also possible that performing tasks online via Zoom and Padlet was too cognitively demanding for the participants (Skehan, 1996, 1998). The procedure of the treatment sessions and the design of the post-reading tasks are not typically seen in Korean

elementary schools. Also, the students had only started receiving online lessons after the pandemic, making it a relatively new way to learn. Hence, it may have been difficult for the students to divert their attention to linguistic forms and engage in LREs. This was also evident in the transcribed data of the video recordings. A large proportion of the conversation between pairs/triads were related to completing the task at hand, such as how to move pictures on the screen and how to use the English keyboard. As suggested by L. Lee (2007), to ensure that L2 learners benefit from learning through video-conferencing, it seems necessary to provide learners with sufficient training in using the technological tools required by the task.

CHAPTER 5

OVERALL DISCUSSION AND CONCLUSION

This final chapter provides an overview of the two studies conducted in the present thesis and discusses the overall findings by relating them to the research questions posed in Chapter 1. The chapter also considers theoretical, methodological, and pedagogical implications of the results obtained. The last section concludes by addressing some limitations of the study and suggestions for future research.

5.1. Overall Discussion

The main goal of this thesis was to examine the extent to which textual enhancement included in post-reading tasks can promote development in L2 grammatical knowledge. Previous research on the role of focus on form in the context of TBLT has mostly examined its acquisitional benefits during oral task performance. Little research has attempted to investigate how task-based development can be fostered through incorporating focus on form interventions into task-based reading sequences. This is a key gap in TBLT literature given that reading tasks are reported to provide learners with ample exposure to L2 features while also acting as a venue for fostering attention to L2 features. Notably, considering that the quality and quantity of input available in foreign language contexts are normally inadequate for L2 learners to achieve advanced levels of proficiency, there is a need to address this gap.

Moreover, previous studies that have examined the effects of textual enhancement as a focus on form technique during L2 reading mostly employed it in the during-task stage despite claims that the post-task stage may be the ideal point to draw learners' attention to form without interfering with focus on meaning. Additionally, there is considerable lack of

research concerning textual enhancement and TBLT in the context of EFL classrooms, particularly with child participants. Given that most L2 instructions are targeted towards children, more research on this population is needed. Against this background, the present study aimed to examine whether textual enhancement incorporated into the post-task stage of task-based reading lessons can foster development in L2 grammatical knowledge among child EFL learners. To this end, two empirical studies were conducted.

The primary aim of Study 1 was to explore the extent to which textual enhancement in post-reading tasks promoted development in learning the third person singular *-s*. A pretest-posttest experimental design was employed with 49 Korean EFL children in their own classroom contexts. They were randomly assigned to the textual enhancement group (n=23) and no textual enhancement group (n=26). The experiment adopted a multiple-exposure design involving six treatment sessions over three weeks. Both groups completed the same treatment tasks, but the target form was boldfaced and underlined in the post-reading task designed for the textual enhancement group. To establish the participants' proficiency, the TOEFL Primary test was administered. The pretest and posttest included a grammaticality judgement test (GJT), and a post-study questionnaire was also administered to learners. Overall, the results showed small but positive effects of textual enhancement. In light of the findings and limitations of Study 1, a follow-up study (Study 2) was conducted to further explore the extent to which textual enhancement in post-reading tasks could promote development in L2 grammatical knowledge by including explicit grammar instruction.

For Study 2, the context was changed from face-to-face (FTF) to online mainly due to the pandemic. The treatment tasks were the same as Study 1, and only modified to fit the synchronous computer-mediated communication (SCMC) environment. Also, based on previous claims that providing explicit grammar explanation may boost the benefits of textual enhancement, explicit instruction was included as a variable in Study 2. As for the research

design, a delayed posttest was added to examine whether any effects of textual enhancement and explicit instruction were retained after two weeks. Additionally, measures to assess improvements in both declarative (i.e., GJT) and procedural knowledge (i.e., writing test) of the target form were used. Given that language-related episodes (LREs) have been reported to provide insight into L2 learning, the interactions among participants during the post-reading tasks were recorded and coded according to number, linguistic focus, and outcome of LREs. Also, the LREs were further distinguished in terms of level of interactional engagement and coded according to whether they elicited elaborate or limited engagement.

The novelty of the studies lay in the potential of the post-reading stage serving as a platform for drawing learners' attention to form without interrupting their focus on meaning. The studies also address a key gap in TBLT literature and SLA in general by examining a much-neglected population, child EFL learners. Lastly, in response to calls for more longitudinal research investigating textual enhancement, the two studies adopted a multiple-exposure design involving six to seven treatments.

The sections to follow will summarize the findings from both Study 1 and Study 2. Both studies share similarities in that the population was similar, although the age of the participants varied (9–10-year-olds for Study 1 and 7–11-year-olds for Study 2), the same treatment tasks were used within a task-based reading sequence, and that textual enhancement was used as a focus on form technique at the post-task stage. The main differences between the two studies are that Study 1 was conducted offline in the participants' classrooms and Study 2 in an online setting. Also, Study 1 administered a post-study questionnaire to examine whether the participants found the post-reading tasks interesting or useful. Study 2 did not administer this questionnaire, but instead examined language-related episodes generated during the conversational interaction that took place

while participants were completing the post-reading task. Lastly, unlike Study 1, Study 2 included a delayed posttest to determine whether any effects obtained were durable.

5.1.1. Effects of Textual Enhancement in Post-Reading Tasks on the Development of L2 Grammatical Knowledge

Based on the results of Study 1 and 2, it appears that employing textual enhancement at the post-task stage can facilitate development of L2 grammatical knowledge, but under certain conditions. In Study 1, textual enhancement in post-reading tasks led to gains in knowledge of the third person -s, and in Study 2 gains were observed when textual enhancement was combined with explicit rule presentation. Also, the gains observed in Study 2 were retained after two weeks. As discussed in Chapter 3, the positive results obtained in Study 1 and 2, despite inconsistent findings reported in previous studies that have employed textual enhancement in the context of reading, might be due to several factors such as (a) incorporating textual enhancement in the post-task stage rather than the during-task stage, (b) the multiple-exposure design of the study, (c) learners' prior knowledge of the target linguistic construction, (d) the age of the participants, (e) the conflated use of textual enhancement and input flood, and (f) the presentation of explicit instruction in combination with textual enhancement.

5.1.2. Effects of Textual Enhancement in Post-Reading Tasks on L2 Reading

Comprehension

Based on the results of Study 1 and Study 2, textual enhancement and explicit instruction do not appear to distract learners from focusing on meaning. This runs counter to research by S. Lee (2007) and Overstreet (1998), which found textual enhancement to have a

negative effect on reading comprehension but corroborates previous research that has shown textual enhancement to be an effective implicit focus-on-form technique for drawing learners' attention to form without interrupting the task of reading for meaning (e.g., Doughty, 1991; LaBrozzi, 2016; Révész et al., 2021). As a possible reason for this favourable outcome, it was suggested that employing textual enhancement in the post-task stage allowed participants to fully attend to meaning while reading the stories, thus leaving enough attentional resources to pay attention to the visually enhanced target form in the post-reading tasks. According to information processing theory, simultaneously processing two types of information that are not yet automatized can result in insufficient processing of one or both types of information and thereby lead to a trade-off effect (Skehan, 1996, 2009; VanPatten, 1996). Hence, the sequential design of Study 1 and 2 in that participants first processed input for meaning during the while-reading stage and then to form at the post-task stage may have benefited learners more than to perform both tasks simultaneously. Studies which have reported reading comprehension to suffer due to textual enhancement utilized it in the during-task stage, thus requiring learners to process for both meaning and form at the same time (Han et al. 2008).

5.1.3. Effects of Providing Explicit Instruction Prior to Performing a Post-Reading Tasks with Textual Enhancement on the Development of L2 Grammatical Knowledge

The findings of both Study 1 and 2 contribute to the extensive literature on the role of attention in how second language learners process input (see Section 2.3.1.). The study demonstrates that learning a L2 grammatical feature is to some extent associated with what learners pay attention to. Consonant with the findings of Indrarathne and Kormos (2017) and Leow et al. (2019), the current research suggests that without providing learners some

support on what to pay attention to in the input, learners will fail to direct their attentional processes to the target feature even if the input is flooded with the target form or if they are textually enhanced. It would have been beneficial, however, if the study had included online measures such as think-aloud protocols or eye-movement recordings to assess whether textual enhancement and explicit instruction had any effect on noticing. As suggested by Jourdenais (2001), collecting protocol reports while the task is being performed can provide researchers with “a means for observing what input the learners notice or attend to, and whether it appears related to their subsequent language performance” (p. 369).

The findings of Study 2 also provide some evidence that may contribute to the ongoing debate over the desirability of providing explicit instruction before performing a task. The overall results revealed that equipping learners with declarative knowledge of the third person singular *-s* facilitated the learning of and accurate written production of the target linguistic construction, at least in the context it was examined. Also, the positive effects were retained after two weeks. Another interesting finding was that the writings produced by the participants after each treatment session showed that providing explicit instruction led to more accurate use of the target form, but slightly lower mean scores on functional adequacy (See Section 4.3.2.3.). Hence, it is plausible, albeit not to a detrimental degree, that the explicit instruction may have led participants to devote their cognitive resources to language form at the expense of the communicative aspects of task performance. (Ellis et al., 2019; Sadeghi & Pourhaji, 2020; Van de Guchte et al., 2019). Nonetheless, taking into account that the trade-off was not substantial compared to the benefits explicit instruction offered, the current study partly aligns with Mochizuki and Ortega (2008) which found that the provision of grammatical guidance did not affect oral complexity and fluency. It also corresponds to Shintani et al. (2016) who reported that providing post-task metalinguistic explanations improved accuracy in subsequent L2 writing.

A plausible explanation for the nonsignificant trade-off effects found in the current study may be due to the intensity of the explicit instruction given to the participants. For example, in Ellis et al.'s (2019) study, explicit instruction was provided through a 10-minute teacher-led explanation followed by a language practice exercise. For the current study, a single PowerPoint slide with third person sentence examples was shown with a 2–3-minute teacher-led explanation. In other words, the intensity of instruction in Ellis et al. may have prompted learners to focus more on the target linguistic construction during task performance, leading to a trade-off between general language use and using the target structure accurately. Another explanation is that the participants in the current study may have been more developmentally ready to acquire the third person singular *-s*, whereas the past passive form examined in Ellis et al., may have been beyond their participants' developmental stage. (Long, 2016; Pienemann, 2005).

5.1.4. Effects of Providing Explicit Instruction Prior to Performing a Post-Reading Tasks with Textual Enhancement on Language Related Episodes

The results for Study 2 showed that relatively few LREs (total of 51) occurred during the 35 hours of talk among pairs/triads of students while performing the post-reading tasks. It was speculated that the participants' lack of linguistic information due to their low level of proficiency contributed to the low incidence of LREs (e.g., Kim & McDonough, 2008; Leeser, 2004; Philp et al., 2010; Williams, 2001). The participants' low proficiency level may also explain the high incidence of L1 use during task performance, which is often seen in language learning settings where learners share the same L1. Although the use of L1 was not directly addressed in this study, previous research has found the L1 to be a beneficial resource for learners, especially for beginner level learners, in sustaining task engagement and helping learners engage in metatalk (e.g., Alegría de la Colina & García Mayo, 2007;

Philp et al., 2010; Tognini et al., 2010). However, it has been suggested that too much L1 use can have negative consequences by limiting the use of the L2 and the potential benefits of negotiating form and meaning. Thus, the high incidence of L1 use in Study 2 could also explain the low number of LREs generated by the participants.

Another potential explanation is that performing the tasks in video SCMC mode may have limited the occurrence of LREs. A number of studies have suggested that the mode of learning (i.e., face to face vs. computer-mediated) can influence patterns of interaction and attention to language (e.g., Baralt, 2013; Baralt & Gurzynski-Weiss, 2011; Carver et al., 2021; Rouhshad & Storch, 2016). The novelty of having to complete tasks in the foreign language via computer may have posed extra cognitive demand on learners (Skehan, 1996, 2009), greater levels of anxiety (Baralt & Gurzynski-Weiss, 2011), or participants may have perceived the online setting as an unnatural place to discuss the L2 compared to their traditional classroom (Baralt, 2014).

An interesting finding of Study 2 was that although the overall number of LREs were small, the group which received explicit instruction generated less LREs compared to the group without explicit instruction. As mentioned in Section 5.1.3., it may have been plausible that giving explicit explanation induced learners to focus more on the target structure and less on other linguistic aspects of task performance. Conversely, the absence of explicit instruction may have allowed the -EI group to focus on general language use, thereby producing a higher number of, and more elaborate LREs. Nonetheless, the LREs revealed only three instances of episodes related to the target form and the participants almost never mentioned the explicit instruction which seem to suggest that the presence of explicit instruction did not distract learners from primarily focusing on meaning, a concern raised by some proponents of TBLT (e.g., Ellis et al., 2019; Long, 2015; Willis & Willis, 2007).

Although the number of LREs were relatively small, the findings of Study 2 provide some evidence that beginner level Korean child EFL learners are able to initiate a focus on language while performing post-reading tasks. Additionally, the child participants attempted at resolving most of the issues raised on their own although some of them were incorrectly resolved. Hence, it seems the interaction that takes place between child EFL learners can present valuable opportunities for L2 learning.

5.2. Implications

5.2.1. Theoretical Implications

The key role attention plays in how second language learners process input has been widely recognized in the field of SLA with ample evidence showing that not all input available to L2 learners will be acquired (e.g., Robinson, 1995, 2003; Schmidt, 1990, 2001, 2010; Sharwood Smith, 1993). In line with this theoretical assumption, the current research sought to investigate how textual enhancement and explicit instruction, as an attention capturing device, could promote development in L2 grammatical knowledge. In line with Indrarathne and Kormos (2017) and Leow et al. (2019), the current research provides some evidence that the amount of attention L2 learners pay to grammatical constructions may influence the extent to which grammatical development occurs.

The findings of Study 2 also lend support to theoretical claims that providing learners with declarative knowledge of the target construction which can be drawn on during practice activities can help proceduralize that knowledge (DeKeyser, 2015; Lyster, 2004). In Study 2, the group that received explicit grammar explanation on the third person singular -s exhibited greater gains in knowledge of, and accurate use of the target construction. Additionally, the study provides some evidence to the Output Hypothesis in that output can prompt learners to

reflect about L2 forms (Kowal & Swain, 1994; Swain, 1995, 2000, 2010). The language-related episodes examined in Study 2 showed that participants mainly deliberated about L2 features while co-writing a new ending for the story. In other words, requiring learners to produce written output seemed to have triggered them to notice a gap in their interlanguage, resulting in syntactic analysis and production of more language-related episodes to fill this gap.

5.2.2. Pedagogical Implications

The current research provides some useful pedagogical implications for using textual enhancement in the context of TBLT as a focus on form technique to draw child EFL learners' attention to specific grammatical features while reading and thereby promote L2 learning. It also sheds light on how EFL elementary school teachers might design and implement tasks beneficial for learning grammar in video SCMC and face-to-face instructional settings. The results suggest that textual enhancement can be a valuable instructional technique to use in EFL classrooms, especially for learners with some prior knowledge of target linguistic constructions.

A strength of the current study is that it was partially conducted in real classroom conditions. Hence, the findings of the study may have important implications for L2 classrooms in foreign task-based learning contexts. First, in most East Asian countries such as Korea, explicit grammar instruction still plays a large role in foreign language classrooms. Hence, excluding grammar teaching from classroom practice may not be advocated by classroom teachers. Also, knowing that it is more natural for teachers to comment on linguistic features that have been enhanced when teaching in the classroom, an important implication of this study is that textual enhancement and explicit instruction did not have a detrimental impact on reading comprehension or on overall task performance. However, it

should be cautioned that giving explicit instructions may interfere with some aspects of productive language use. Hence, to minimize the possibility of distracting learners from a focus on meaning, the present study suggests that employing focus on form in the post-reading task stage may be more beneficial. In terms of the actual explicit grammar instruction given, it may be more suitable to present it in a simpler fashion such as through a single handout or a brief explanation. Arguably, providing a succinct explanation about the target grammar is more economical in an already busy classroom, but this remains to be explored in future research.

Lastly, allowing EFL children to collaborate in pairs or groups seems to provide valuable opportunities for them to learn from each other's knowledge of the L2 and co-construct meaning. For participants with low proficiency, allowing them to use their L1 may enable them to use their cognitive resources to engage in deliberations about the L2 (e.g., Alegría de la Colina & García Mayo, 2007). Also, to encourage more talk about language form, a collaborative writing task may be more suitable in generating more instances of form-related LREs (e.g., García Mayo, 2002a, 2002b, García Mayo & Azkarai, 2016). Further, as discussed in Chapter 1, given that learners may not perceive the online context as a platform appropriate for discussions related to language (e.g., Elola & Oskoz, 2010; Kessler et al., 2012; Rouhshad & Storch, 2016), training learners with collaborative strategies such as asking for clarification or help may improve the effectiveness of collaborative interactions during communicative tasks (Sato & Dussuel Lam, 2021).

5.3. Limitations and Future Directions

The present thesis is not without limitations, and its weaknesses should be considered in interpreting the findings. One methodological weakness is that there were no online measures such as think-aloud protocols or eye-movement recordings to assess whether

textual enhancement and explicit instruction had any effect on noticing. Thus, future studies could employ such techniques to obtain a more direct insight into attentional allocation and noticing processes. A further limitation is that only one linguistic item and one level of language proficiency was examined. Hence, the findings cannot be extended to other types of linguistic features or proficiency levels. The study would have also benefited from having a larger sample size. Another potential limitation is the absence of measures for working memory, which has been suggested to be closely linked to attention and thereby mediate the effectiveness of input enhancement (e.g., Indrarathne & Kormos, 2017, 2018; Simard & Foucambert, 2013). Future studies including diverse working memory measures are warranted to shed light on the role of working memory in facilitating L2 learning from implicit focus on form techniques such as textual enhancement. It would also be interesting to examine whether length or type of explicit instruction would have differing effects on L2 grammar learning, as compared to the short grammar lesson given in the current study. Lastly, replication studies are also needed involving older/adult participants with different proficiency levels, L1 backgrounds, and instructional contexts.

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APPENDICES

Appendix A-1 Information Sheet and Consent Form for Study 1 (For Participants)



Hello!
My name is Yoojin.
I am a student from a university in London, who is interested in children and reading.
I would like to spend 11 classes with you to read some storybooks and do some of my reading activities. I chose you and your classmates because for beginner English learners like you reading storybooks might help improve your English in many ways. Also, you might learn to enjoy reading in English!

I would like to:

- Read storybooks with you
- Watch you do some reading activities
- Test how well you do




These are some of the books you'll read. I picked out these books especially for you!

Please let me know if you are happy to take part by ticking one of the boxes.

You can change your mind at any time, and you can ask me any questions at any time too.

Thank you!



Contact Details:
Yoojin Chung
Phone: 016 3776 7211
Email: danyc2@gmail.com

[Tick ✓ one of the boxes]

I want to take part in this project.

I don't want to take part in this project.

*You will be given a copy of this sheet and the signed consent form.

Appendix A-2 Information Sheet and Consent Form for Study 1 (For Parents)

STUDY INFORMATION SHEET FOR PARENTS:

Investigating the Effects of Reading Tasks on Developing English

I would like to invite your child to participate in a research study that examines how engaging in reading tasks can improve English while reading storybooks. In particular, the project intends to examine how different types of post-reading tasks can best help students read English storybooks and develop their English. I am a PhD student in the Department of Communication, Culture and Media at the Institute of Education, University of London, interested in second language learning through reading.

If you allow your child to participate, I will ask your child to take part in eleven reading sessions during regular school hours at XX Elementary School. That is two times a week for five weeks. During each session, your child will read one storybook and engage in different types of tasks. These tasks are designed to be motivating and fun and will not require your children to produce English at a level that may cause anxiety or stress. Each session will last approximately 40 minutes. Your child will also be asked to fill out a short questionnaire about their reading experience and complete a reading and grammar test so that I can measure how much they have improved through reading.

At every stage of the project and beyond, the name of your child will remain confidential. Their identity will be anonymised by the use of a unique identifier. Any data obtained during the study will be kept securely. I will be the only person who will have access to the dataset. However, confidentiality may be limited and conditional and I have a duty of care to report to the relevant authorities any possible harm/danger to the child or others.

I will share the overall results of the study with your school via e-mail. The results of individual students will not be disclosed to anyone other than myself. The overall results of the study, without reference to individual participants, may also be presented at professional second language conferences and in research publications.

If you do not wish for your child to participate in this study, their data will not be used although he/she will still be joining the reading sessions. Also, during sessions when participating students are taking tests those that are not participating will be given English puzzles and games to do individually. Even if you have agreed to participate, you are free to withdraw your child from the study at any time without reason and without any impact. If you decide to withdraw your child or your child decides to withdraw, any data collected from them will be destroyed. If you have any queries about the study, please feel free to contact me at XX@ucl.ac.uk or 010-XXX-XXXX.

I would be very grateful if you would allow your child to take part!

Yoojin Chung
PhD student at the Institute of Education, University College London

Project title: *Investigating the Effects of Reading Tasks on Developing English*

- | | YES | NO |
|---|--------------------------|--------------------------|
| 1. I have read and had explained to me by Yoojin Chung and the homeroom teacher the Information Sheet relating to this project. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I have had explained to me the purposes of the project and what will be required of my child, and any questions have been answered to my satisfaction. I agree to the arrangements for my child's participation as described in the Information Sheet. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I understand that my child's participation is entirely voluntary and that we have the right to withdraw from the project at any time. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I agree with the contents of this Consent Form and have received the accompanying Information Sheet. | <input type="checkbox"/> | <input type="checkbox"/> |

Parent Name:

Child Name:

Signed:

Date:

* You will receive a copy of the information sheet and the signed consent form

Appendix A-3 Information Sheet and Consent Form for Study 2 (For Participants)



Hello!

My name is Yoojin.

I am a student from a university in London, who is interested in children and reading. I would like to spend 12 online classes with you to read some storybooks together and do some reading activities. I chose you and your classmates because you are beginner learners of English and reading storybooks might help you improve your English and enjoy reading.

I would like to:

- Read storybooks with you
- Video record how you do some of the reading activities
- Test how much you improve



These are some of the books you'll read. They are storybooks that I've picked out especially for you!

You can change your mind at any time without giving me a reason and you can stop participating in my classes at any stage. You can ask me any questions at any time too.

Please let me know if you are happy to take part by selecting one of the choices below.

Thank you!

Appendix A-4 Information Sheet and Consent Form for Study 2 (For Parents)

STUDY INFORMATION SHEET FOR PARENTS:

Investigating the Effects of Reading Tasks on Developing English

I would like to invite your child to participate in a research study that examines how engaging in post-reading tasks can improve English while reading English storybooks. In particular, the project intends to examine how different types of post-reading tasks can best help students to read English storybooks and develop their English ability. I am a PhD student in the Department of Communication, Culture and Media at the Institute of Education, University of London, interested in second language learning through reading.

If you allow your child to participate, I will ask your child to take part in twelve reading sessions during after school hours online using Zoom. That is two times a week for eight weeks. During each session, your child will read one storybook and engage in different types of reading tasks. These tasks are designed to be motivating and fun and will not require your children to produce English at a level that may cause anxiety or stress. Each session will last approximately 50 minutes. Your child will also be asked to fill out a short questionnaire about their reading experience and complete a reading and grammar test so that I can measure how much they have improved after the lessons.

At every stage of the project and beyond, the name of your child will remain confidential. Their identity will be anonymised by the use of a unique identifier. Any data obtained during the study will be kept securely. I will be the only person who will have access to the dataset. However, confidentiality may be limited and conditional and I have a duty of care to report to the relevant authorities any possible harm/danger to the child or others.

I will share the overall results of the study with your school via e-mail. The results of individual students will not be disclosed to anyone other than myself. The overall results of the study, without reference to individual participants, may also be presented at professional second language conferences and in research publications.

Even if you have agreed to participate, you are free to withdraw your child from the study at any time without reason and without any impact. If you decide to withdraw your child or your child decides to withdraw, any data collected from them will be destroyed. If you have any queries about the study, please feel free to contact me at XX@ucl.ac.uk or 010-XXX-XXXX.

I would be very grateful if you would allow your child to take part!

Yoojin Chung
PhD student at the Institute of Education, University College London

Project title: *Investigating the Effects of Reading Tasks on Developing English*

(Distributed using Microsoft Forms)

- | | YES | NO |
|---|--------------------------|--------------------------|
| 1. I have read and had explained to me by Yoojin Chung and the homeroom teacher the Information Sheet relating to this project. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I have had explained to me the purposes of the project and what will be required of my child, and any questions have been answered to my satisfaction. I agree to the arrangements for my child's participation as described in the Information Sheet. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I understand that my child's participation is entirely voluntary and that we have the right to withdraw from the project at any time. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I agree with the contents of this Consent Form and have received the accompanying Information Sheet. | <input type="checkbox"/> | <input type="checkbox"/> |

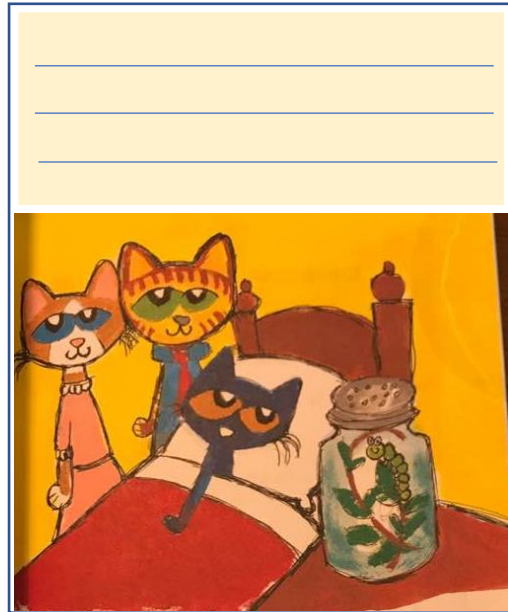
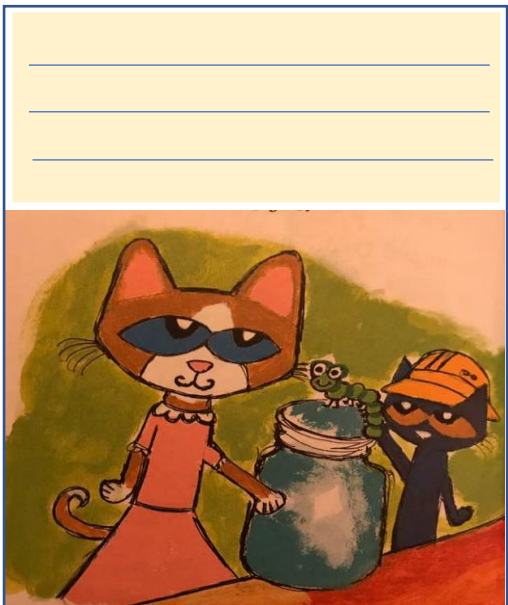
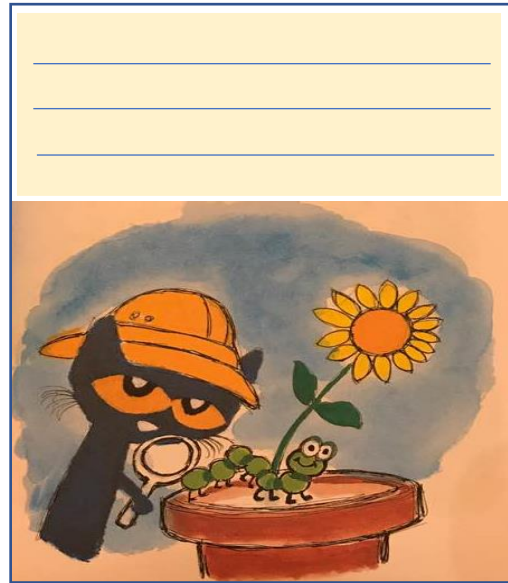
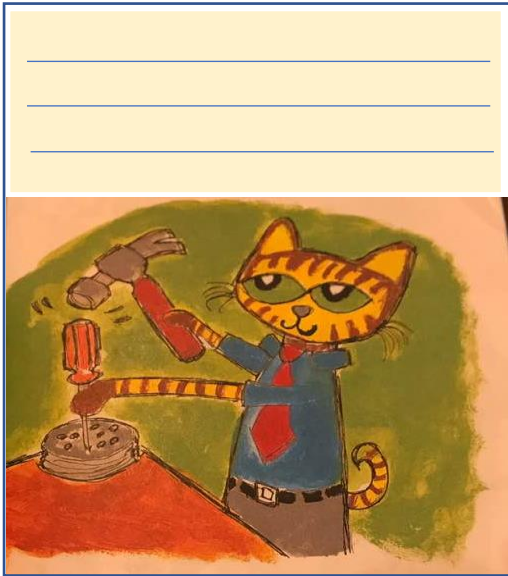
Parent Name:

Child Name:

Signed:

Date:

Appendix B. Example of Picture Cards for Study 1



Appendix C: Example of Reading Comprehension Questions for Study 1

The Boy and the Violin



Name: _____

☞ 책의 내용과 일치하면 T (true) 일치하지 않으면 F (false)를 적으시오.

1. The boy gives the woman his field.
2. The boy plays the violin in the forest.
3. The sheep sing to the music.
4. Animals follow the boy's music into the shop.
5. The king thinks the boy is funny.
6. The animals dance and the king's daughter laughs.

Appendix D. Post-Reading Task With and Without TE (Study 1)

< for +TE groups >

Choose and write the appropriate sentence for each picture. Then sequence the pictures in the correct order.

- a) Pete **finds** a green caterpillar in the flowerpot.
- b) A beautiful butterfly **comes** out of the pupa.
- c) They **put** the caterpillar in a big jar.
- d) Pete and Marty **wait**.
- e) Pete **waits** and **waits**.
- f) Dad **puts** lots of little holes in the lid.
- h) They **say** good night.
- i) They **take** the jar to the park.

<For -TE groups >

Choose and write the appropriate sentence for each picture. Then sequence the pictures in the correct order.

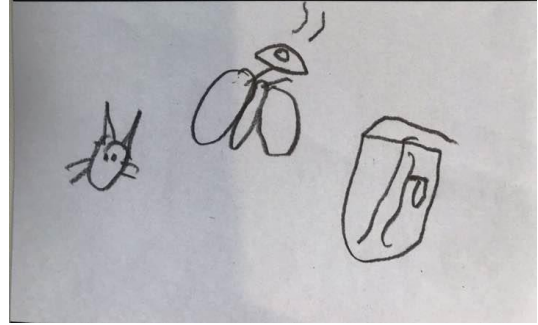
- a) Pete finds a green caterpillar in the flowerpot.
- b) A beautiful butterfly comes out of the pupa.
- c) They put the caterpillar in a big jar.
- d) Pete and Marty wait.
- e) Pete waits and waits.
- f) Dad puts lots of little holes in the lid.
- h) They say good night.
- i) They take the jar to the park.

Appendix E. Example of New Story Endings for Study 1

She fly away to the sky.
pete and parents wave
to Butterfly.



Pete finds a new caterpillar, but the first butterfly come to Pete and die.



Appendix F: Reading Comprehension Questions for Study 2

Lownu Mends the Sky

Reading Comprehension Quiz

* Required

1. 자기 이름 써주세요. *

2. The children see stars falling from the sky. * (1 Point)

True(진실)

False(거짓)

3. The children find ten pieces of blue. * (1 Point)

True

False

4. There are twenty holes in the sky. * (1 Point)

True

False

5. They cut green leaves to mend the sky. * (1 Point)

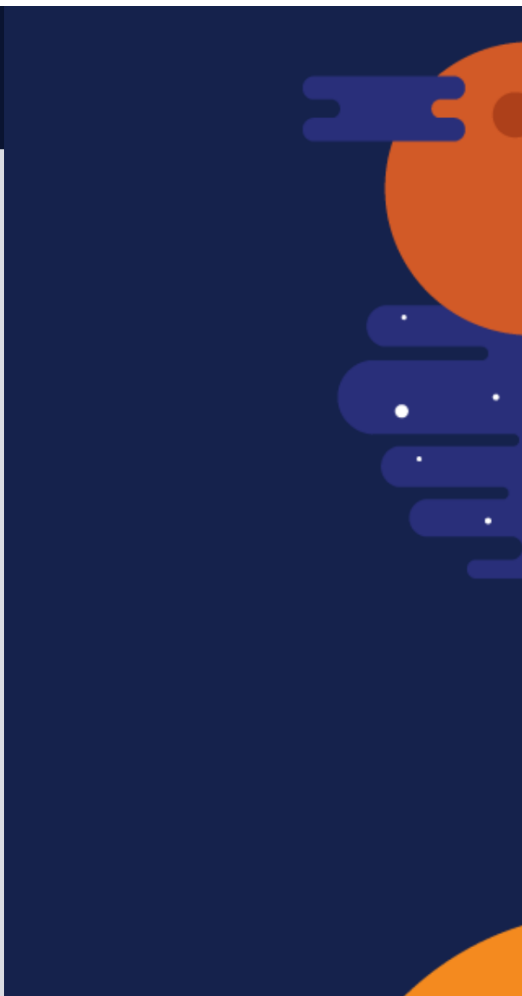
True

False

6. Lownu cuts her blue dress and silver apron. * (1 Point)

True

False



Appendix G: Rating Scale for Functional Adequacy

Content: Is the number of information units/ideas provided in the text adequate and relevant?

1	2	3	4	5	6
The number of ideas is not at all adequate and insufficient and the ideas are unrelated to each other.	The number of ideas is scarcely adequate and the ideas lack consistency.	The number of ideas is somewhat adequate, even though they are not very consistent.	The number of ideas is adequate and they are sufficiently consistent.	The number of ideas is very adequate and they are very consistent to each other.	The number of ideas is extremely adequate and they are very consistent to each other.

Task requirements: Have the task requirements been fulfilled successfully? (i.e., alternative ending to the story)

1	2	3	4	5	6
None of the questions and the requirements of the task have been answered.	half) of the questions and the requirements of the task have been answered.	Approximately half of the questions and requirements of the task have been answered.	Most (more than half) of the questions and the requirements of the task have been answered.	Almost all the questions and the requirements of the task have been answered.	All the questions and the requirements of the task have been answered.

Comprehensibility: How much effort is required to understand text purpose and ideas?

1	2	3	4	5	6
The text is not at all comprehensible. Ideas and purposes are unclearly stated and the efforts of the reader to understand	The text is scarcely comprehensible. Its purposes are not clearly stated and the reader struggles to understand	The text is somewhat comprehensible. Some sentences are hard to understand at a first reading. A second reading	The text is comprehensible. Only a few sentences are unclear but are understood, without too much effort, after a second	The text is easily comprehensible and reads smoothly. Comprehensibility is not an issue.	The text is very easily comprehensible and highly readable. The ideas and the purpose are clearly stated.

<p>the text are ineffective.</p>	<p>the ideas of the writer. The reader has to guess most of the ideas and purposes.</p>	<p>helps to clarify the purposes of the text and the ideas conveyed, but some doubts persist.</p>	<p>reading.</p>		
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