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## Enhancing the Grammatical Competence of Middle-School EFL Low-Achievers Through a Progressive English Syntax Teaching Program

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Robust studies have employed inductive and deductive methods to teach grammar to second-language learners in various contexts (e.g., Benitez-Correa et al., 2019; Seliger, 1975; VanPatten & Oikkeno, 1996). However, few have investigated the effectiveness of grammar teaching methods designed for low-achieving learners in the context of learning English as a foreign language (EFL). The current study therefore developed a grammar sentence pattern remedial program (i.e., the Progressive English Syntax Teaching [P-BEST] program) to enhance the grammar proficiency of middle-school EFL low-achievers. A pretest–posttest equal-group experimental design was adopted for this study, which was conducted over a period of 2 years (four semesters). Ninety students who failed their Diagnostic and Certification English Competence subtests were enrolled in this study. The P-BEST program was implemented for 35 students, who formed the experimental group, and traditional instruction was implemented for the other 55 students, who formed the control group. The results reveal that the P-BEST intervention significantly improved the grammar scores of the students in the experimental group, resulting in the experimental group students significantly outscoring the control group on grammar tests after the intervention. These results provide evidence that an inductive or implicit-instruction method can effectively improve the grammar proficiency of low-achieving EFL learners. With an improved understanding of the proficiencies of learners and their learning environments, the grammar teaching strategies used in the P-BEST program can be applied to other EFL contexts.

*Keywords:* low-achieving English learners, inductive teaching, grammar teaching, remedial instruction

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## Issues of Grammar Teaching Approaches in EFL Learning

It has been widely acknowledged that grammar—the rules describing the patterns of a language (Slater & Li, 2012)—is important when learning a second or foreign language. Most researchers and practitioners contend that pedagogical practices play a certain role in affecting grammar learning (Ellis, 1990; Larsen-Freeman, 2003; Lightbown, 1998; Lightbown & Spada, 1990; Long, 1983; Spada & Lightbown, 1993; VanPatten, 1996). There is now substantial evidence for the utility of instructions in facilitating grammar learning (Ellis, 1995; Kang et al., 2019; Long, 1983; Long & Robinson, 1998; Norris & Ortega, 2000; Schenck, 2017).

However, the types of instruction under which grammar is best learned remain controversial. Researchers have suggested that drawing the attention of students to linguistic forms in communicative contexts is more effective than having students simply focus on either form or communication (Doughty & Williams, 1998; Fotos, 1993; Fotos & Ellis, 1991; Schmidt, 1990). The meta-analysis of Norris and Ortega (2000) found that explicit instructions, in which the attention of learners was directed to specific grammar forms by means of either rule presentation or search, was better than implicit ones in which no attempt was made to introduce particular structures. Two subsequent meta-analyses (Kang et al., 2019; Spada & Tomita, 2010) also found that explicit instructions were more effective than implicit ones.

On the other hand, two of the most discussed and contrasted instruction types are the deductive and inductive methods, which merge well with the continuum of explicitness described by Norris and Ortega (2000). In deductive instructions, explicit rule presentation includes exemplars or exercises, such as the teacher presenting the grammatical rule when wrapping up the lesson (Seliger, 1975) or leading students to verbally generate a rule after exposing them to an input (Shaffer, 1989). In contrast, in inductive instructions the exemplars are provided so that the learners work out the governing rules for themselves (DeKeyser, 2003; Eisentein, 1987; Krashen, 1999; Nunan, 2002). Despite the long history of debate regarding the effectiveness of these two methods (Slater & Li, 2012) and the recent proliferation of empirical studies exploring related issues, the relative efficacies of deductive and inductive instructions remain unclear. The instruction type that yields the best learning results for L2 learners at different learning stages and with different proficiencies still needs further investigation (Cerezo et al., 2016).

In addition to instruction types of grammar, what might stimulate or inhibit language learner motivation should also be brought to the fore when designing a remedial program specifically for low-achieving learners (Hu & Hsu, 2020). Learners who need remedial instruction are usually low-motivated, or even demotivated in their learning (Chen, 2009), and thus, identifying engaging activities which can simultaneously meet the cognitive and affective needs of those learners is an imperative task.

## Studies Finding More-Favorable Results Under Deductive Instructions

Several studies have found more-favorable results under deductive instructions (Erlam, 2003; Radwan, 2005; Robinson, 1996; Seliger, 1975; Tode, 2007). Seliger (1975) recruited 58 adults with mixed proficiency levels and linguistic backgrounds in the US and divided them into two experimental groups that received either the deductive method (the rule explanation precedes exemplars) or the inductive method (the exemplar precedes rule explanation) as well as a control group that received no instruction. Following the instructions targeting the order of English pronoun modifiers, the participants took recall and retention tests, both comprising multiple-choice items. Despite the lack of statistically significant differences in the recall test results between the two experimental groups, the group instructed using the deductive method improved more in the retention test. Similarly, Robinson (1996) conducted a study in the US with 104 adults from intermediate English courses. The participants were assigned to either the implicit, incidental, rule search (explicit-inductive, with no rule explanation provided), or the instructed (deductive) condition. The posttreatment grammar judgment test results indicated that while participants under the rule-search

condition consistently answered faster than did those in the three other groups, participants in the instructed condition provided more-accurate answers than participants in the other conditions. Another study in the US by Radwan (2005) recruited 42 low-intermediate English learners to learn English dative alternation under four conditions: textual enhancement (inductive), rule-oriented (deductive), content-oriented, and control conditions. In both immediate and delayed posttests, learners in the rule-oriented condition outperformed learners in the other conditions, whereas learners in the textual enhancement condition did not show a significant improvement compared with the two other groups.

Tode (2007) targeted English Learning in Japan by recruiting 89 Japanese junior high-school students at beginning levels to learn the correct usage of *be* in copular sentences (e.g., *\*My sister a student*) and in sentences with the simple present tense, in which *be* is often overgenerated by Japanese learners (e.g., *\*My father is love coffee*). These students were exposed to no instruction, to explicit (deductive) instruction with the corresponding L1 structure explained, or to implicit (inductive) instruction, in which exemplars to be memorized were provided. To test the durability of instructions, in addition to five fill-in-the-blank posttests and controlled translation items, the auxiliary *be* was introduced after the second posttest. While students instructed using deductive instruction performed better than did those in the two other groups before introducing the auxiliary *be*, they experienced a decreased improvement after the introduction, scoring similarly to the control and inductive groups. When investigating the learning of French direct object pronouns by high-school students, Erlam (2003) also observed a decreased improvement between posttests. In that study, 69 high-school students in their second year of learning French were divided into two experimental groups and one control group. The participants were then assessed using oral and written production, and in listening and reading comprehension tests. The results of the immediate posttest indicated greater improvement in the deductive group, but this was not maintained in the delayed posttest.

Despite the consistency in presenting more-favorable results from deductive instructions, these studies have illustrated different short-term and long-term learning effects. While Radwan (2005) and Seliger (1975) reported learning retention under deductive instructions, Erlam (2003) and Tode (2007) found a decreased improvement under deductive instructions between posttests.

### **Studies Finding More-Favorable Results Under Inductive Instructions**

Conversely, the studies that found greater improvement under inductive instructions produced more-congruent long-term and short-term effects (Benati, 2015; Benitez-Correa et al., 2019; Haight et al., 2008; Herron & Tomasello, 1992; Tammenga-Helmantel et al., 2016; Tomasello & Herron, 1988; VanPatten & Oikkeno, 1996; Vogel et al., 2011); that is, the learners taught using inductive instructions in these studies consistently performed better than did those using deductive instructions.

VanPatten and Oikkeno (1996) divided 59 high-school students who were learning Spanish into a control group and two experimental groups. The control group was exposed to both rule explanation and structured input, while the two experimental groups were exposed to rule explanation without exercise (deductive), or structured input without any explicit information regarding the targeted rule (inductive). In the posttreatment interpretation test, the group exposed to structured input not only improved more than the group given rule explanation, but also had a mean score similar to that in the control group. In the production posttest, the structured input group showed better results than the rule explanation group despite not outperforming the control group. From these results the authors concluded that structured input (induction) was more effective in grammatical structure learning. In Benati (2015), the results of VanPatten and Oikkeno (1996) were successfully replicated using 38 university students who were learning Italian future tense. The delayed posttest administered in that study also demonstrated the effectiveness of structured input (inductive method) in learning retention. Benitez-Correa et al. (2019) applied a similar design of inductive instruction (i.e., structured input rich in targeted grammatical forms) to 70 senior high-school students in Ecuador, who were divided into either the deductive or inductive group to learn several

English grammatical structures, including the simple present, simple past, and future tenses. The results of the posttest, which consisted of multiple-choice items, indicated that inductive instructions induced greater improvements.

Both VanPatten and Oikkeno (1996) and Benitez-Correa et al. (2019) examined inductive instructional methods in which grammatical rules were not presented or explained explicitly to learners at any point, while other studies considered guided inductive instructional methods in which the underlying patterns were made known to the learners either using explanation or sample sentences after exemplars and activities. Tomasello and Herron (1988) performed the first of several studies that employed guided induction, by assigning 39 university students in beginning-level French courses to either the garden-path condition (inductive), which required the students to take an active role in inducing the rules, producing the wrong form for the exceptions, and receiving the correct forms of the exceptions from the instructor, or the control condition (deductive), in which the exceptions were explicitly demonstrated and explained to the participants. In the three fill-in-the-blank posttests, the participants under the garden-path condition consistently scored higher than the control group.

Herron and Tomasello (1992), Haight et al. (2008), Vogel et al. (2011), and Tammenga-Helmantel et al. (2016) followed Tomasello and Herron (1988) and compared deduction with guided induction. In these studies, after the students independently induced the pattern of the targeted structure, the instructor purposefully directed the attention of the students to jointly analyze and complete a sample sentence (Haight et al., 2008, p. 292). Herron and Tomasello (1992) divided 26 university students at a beginning level of French learning into two groups who alternated regularly between deductive and guided inductive instructions. The results of both the recall and retention tests favored guided induction. Haight et al. (2008) assessed the learning improvement of 47 students at a beginning level of French using immediate in-class quizzes and a retention test. Students taught under guided inductive instruction had better results for both of these parameters. Tammenga-Helmantel et al. (2016) recruited 219 Dutch high-school students learning a complex German grammatical structure and observed greater improvement under inductive instruction. However, Vogel et al. (2011) recruited 40 university students at intermediate level of French, and observed no statistically significant difference in long-term improvement between deductive and guided inductive conditions, despite the short-term results being more favorable under the guided inductive instruction.

### **Limitations of Previous EFL Grammar Teaching Studies**

Despite the incongruencies identified among the above-mentioned studies, the accumulated results of the studies have been informative. Findings of the studies recruiting learners at beginner L2 levels seemed to favor inductive instructions (Benati, 2015; Benitez-Correa et al., 2019; Haight et al., 2008; Herron & Tomasello, 1992). However, the results for learners above preintermediate levels were less conclusive, with the findings of Erlam (2003), Robinson (1996), and Seliger (1975) supporting deductive instructions and those of Abraham (1985), Adrada-Rafael (2017), and Rosa and O'Neill (1999) supporting neither.

In spite of the implications noted above, previous experiential studies of inductive-deductive instructions have had four major limitations. First, despite the robustness of studies investigating inductive and deductive instructional methods to teach L2 in various contexts, few studies have examined grammatical approaches in EFL contexts. Most previous studies targeted either French or Spanish (Adrada-Rafael, 2017; Cerezo et al., 2016; Erlam, 2003; Haight et al., 2008; Herron & Tomasello, 1992; Hwu et al., 2014; Jean & Simard, 2013; Osa-Melero, 2017; Rosa & O'Neill, 1999; Shaffer, 1989; Tomasello & Herron, 1988; VanPatten & Oikkeno, 1996; Vogel et al., 2011) or investigated English-related instructional issues in English-speaking countries (Abraham, 1985; Radwan, 2005; Robinson, 1996; Seliger, 1975; Smart, 2014). Considering the low exposure of EFL learners to the target language outside classrooms as well as grammatical structures and features in different language systems are different, instructional methods in EFL contexts may yield different results and so demand closer examination. Second, detailed descriptions

of the L2 proficiency of the learners and how the participants were selected were not provided for some of these studies. Many of these studies only offered language level of learners followed institutional stages (e.g., semester/academic year), which makes it difficult to infer their exact level of proficiency and hard to apply the results to other contexts. Third, many of these studies focused on a single set of grammatical rules, such as the psych verb *gustar* in Spanish (e.g., Hwu et al., 2014). While this type of research design saves time and is straightforward, the generalizability of the devised instructional methods is restricted to other L2 curricula, which often involve the teaching of more than one set of forms. Fourth, most of the researchers did not provide detailed and structured pedagogical steps for their intervention. They investigated the efficacies of inductive and deductive instructions and devised interventions with shorter durations, such as less than 1 hour (e.g., Hwu et al., 2014; Shaffer, 1989), and that only included a few sessions (e.g., Erlam, 2003; Seliger, 1975; Tammenga-Helmantel et al., 2014). Results of such short-term interventions without specifying pedagogical steps may be biased and less transferrable to other instructional contexts (DeKeyser, 2003; Kang et al., 2019; Long & Robinson, 1998; Muñoz, 2011; Norris & Ortega, 2000).

### **Features of Remedial Instruction for EFL Low-Achievers**

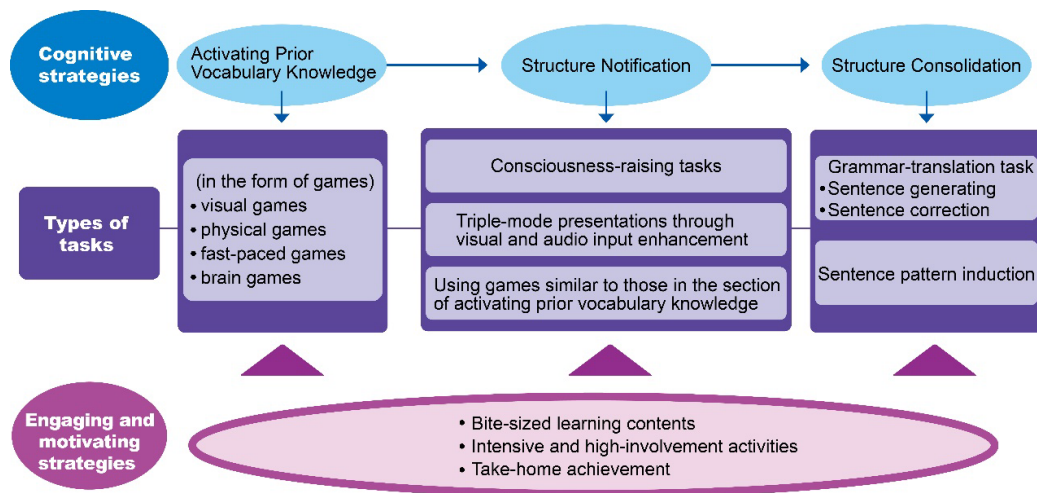
While the above literature yielded insights for developing a better understanding of the cognitive dimensions affected by the two grammatical approaches for different proficiencies of language learners, affective dimensions were not incorporated into the discussion. As motivation has been recognized as one of the crucial factors influencing the success of L2 learning (e.g., Dörnyei, 1998), it is important to be aware of learning characteristics of low-achieving learners and consider if designed teaching approaches and strategies can truly meet those learners' affective and psychological needs (Hu & Hsu, 2020). Lau and Chan (2001) illustrated some characteristics of low-achievers, such as having motivational problems in learning and deficiencies in using learning strategies as well as in academic self-concept. In a similar vein, in L2 research, Gardner et al. (1997) also reported that learners' foreign language achievement and noncognitive variables (e.g., foreign language anxiety, self-confidence) are closely related. That is, when low achievers constantly lag behind their peers and lack a sense of achievement, they might become more frustrated and unmotivated in the class. This vicious cycle interwoven with the knowledge gap, an unwillingness to participate, and a lack of motivation would gradually result in achievement gaps in the language classroom.

According to Chen and Tsai (2012), the EFL learning achievements in a Taiwanese middle school followed a bimodal distribution, which means many students achieve highly in the English language (those on the right side of the distribution curve), while many students also achieve poorly (those on the left side of the distribution curve). Moreover, according to the statistics of the Comprehensive Assessment Program (Research Center for Psychological and Educational Testing at National Taiwan Normal University, 2021), which is the official test for monitoring the learning achievement of students when they complete their middle-school learning stage (ninth grade), 28.20% of those low-achievers in the English language did not achieve the basic-level criterion. This highlights that the English learning of many students lagged behind that of their peers during the beginning stage, and so a remedial program is needed that provides effective and motivating learning strategies to bridge the achievement gap. Although previous researchers have proposed some remedial programs to address this situation for EFL learners at different levels (e.g., Abu-Rabia et al., 2013; Al-Qahtani, 2015; Ismail & Tawalbeh, 2015), we observed a scarcity of interventional studies focused on teaching approaches for improving the grammatical abilities of EFL low-achievers. Hu and Hsu (2020) conducted one of the few studies that proposed concrete steps for building up the vocabulary and grammatical sentence pattern repertoires of low achievers while bridging the gap presented in learning contents between remedial and regular classes. The grammatical sentence learning program described below was derived from principles delineated by Hu and Hsu (2020).

## Instructional Methods in The Progressively Built-up English Syntax Teaching Program for Middle-School EFL Low-Achievers

To address the need for an intervention program to effectively help low-achieving learners to enhance their abilities in English grammar, this study proposed the Progressively Built-up English Syntax Teaching Program (P-BEST) for EFL low-achievers in middle school. The P-BEST is an inductive/implicit-oriented grammar teaching program encompassing teaching strategies and scenarios specifically designed for EFL low-achievers. The framework and procedure of the P-BEST is illustrated in Figure 1. Instructional methods in each unit of the P-BEST consist of four strategies with various tasks.

**Figure 1**  
*Framework and Procedure of the P-BEST*



### Strategy 1

The first strategy in the P-BEST is activating prior vocabulary knowledge. Vocabulary is undoubtedly regarded as a determinant for the development of four language skills (Alderson, 2005). Nevertheless, some EFL low-achieving students even have difficulties recognizing alphabet symbols, let alone memorizing vocabulary words (Hu & Hsu, 2020). Hence, helping those learners build up their lexical repertoire is a primary step for improving their grammar knowledge (Larsen-Freeman, 2002). Under this strategy, there are four types of teaching tasks administered in the form of games to activate the prior vocabulary knowledge of students. Prior to sentence pattern presentation, 4–6 vocabulary words that had been taught in regular classes and also previously in elementary school can be used with the focused sentence pattern and are reviewed through four types of games: visual, physical, fast-paced, and brain games. Visual games are those that require visual attention from students, such as the teacher flashing a picture and the students saying the corresponding vocabulary word, or the teacher showing pictures of vocabulary words and then removing one without the students looking, after which the students say which word is missing. Physical games are those involving body moments such as charades and Simon Says. Meanwhile, fast-paced games require a quick response from students, such as “touch the item,” in which the teacher says a vocabulary word and the students quickly touch the corresponding picture on the board. Brain games require students to think, such as the teacher drawing or speaking a vocabulary word and the students guessing the word. These games all help to activate the prior vocabulary knowledge of students by requiring them to demonstrate receptive

and productive knowledge of the words. Furthermore, to ensure that the prior vocabulary knowledge of every student was activated during the games (not just those playing or winning), the teacher elicited pronunciation of the vocabulary words from the student(s) who lost as well as others in the class at the end of every round. Once prior vocabulary knowledge was activated, students could learn how these vocabulary words could be used with a focused sentence pattern, and thus become familiar with the grammatical structure of a sentence pattern.

### ***Strategy 2***

The second strategy in the P-BEST is structure notification. Low-achieving EFL learners generally had deficient background knowledge for constructing a sentence pattern in the English language, since the syntactical structure of English is very different from that of their L1 (Chinese). Simple instruction with grammar rules coupled with abstruse grammatically technical terms might frustrate learners and impair their interest in English learning and paying attention to the linguistic features of the English language. Considering this, the current study adopted an implicit approach to grammar teaching (e.g., Fotos, 1993; Fotos & Ellis, 1991; Schmidt, 1990) to enhance how students notice the structure and pattern of sentences and to simultaneously arouse their awareness of the “rules of word ordering” in English sentences.

Two types of tasks were employed in this stage. First, instead of explaining the grammar rules, teachers used triple-mode presentations to enhance the input features of each sentence pattern. Each sentence pattern was presented in three modes: (1) as a complete sentence clearly written on the blackboard, generally presented in the format of a dialogue with a question and corresponding answer, (2) using flashcards to provide learners with visual images of the given vocabulary words while doing a word-substituting activity, and (3) using intensive and repeated oral practices as audio input stimulants. The students can become familiar with the sentence pattern by paying attention to the word order and the substituted flashcards, and also by shadowing the sentence (taking turns practicing it). Such enhancement of the visual and audio input (Doughty & Williams, 1998) not only elicits the consciousness of students in noticing sentence structure and meaning, but also helps them to form and memorize a given grammatical structure through the triple-mode presentation. The second type of task is familiarizing the sentence pattern using games with functions similar to the above-mentioned vocabulary reactivation games. Learners are led to practice the sentence pattern orally through an array of games that require them to speak up.

### ***Strategy 3***

The third strategy in the P-BEST is structure consolidation. After students notice and familiarize themselves with the structure and pattern of a sentence, the next step is to help them consolidate the syntactical structure through production tasks. Two types of tasks were adopted in this stage. The first was the grammar translation task. Despite the grammar translation approach being criticized over the past several decades (e.g., Krashen, 1987; Richards & Rodgers, 2001), translation has been commonly adopted by foreign language teachers as an instructional aspect in the classroom (Malmkjar, 1998; Witte et al., 2009). In fact, as Lee (2018, p. 371) remarked, translation could be regarded as “one of the most helpful and contextualized teaching methods” in L2 classrooms. For the grammar learning of EFL learners, translation is an appropriate task for several reasons. First, oral or text-based production of students in translation may facilitate their mental engagement toward sentence structure and patterns by regenerating the sentence structure and pattern they had received. Second, conducting translation exercises in groups may help learners to recognize their grammatical errors through peer feedback and correction. This can provide opportunities for the class to pay attention to how others translate. Third, the translation task can be easily tailored for the different proficiency levels of EFL learners. There were two subtasks in the translation task, sentence generation and correction: (1) a sentence-generation task based on what had been previously orally

practiced, in which sentences with the same pattern (identical grammatical features) were presented in Chinese to the students, and the students voluntarily selecting one of the sentences assigned by the teacher and presenting their translation work on the board to the class; and (2) a sentence-correction task, in which after all the students had finished their translation on the board, they were asked to identify the errors of the generated sentences and give each other feedback, which not only stimulated the mental engagement of students toward sentence patterns but also raised their awareness of gaps in their grammatical knowledge.

The second task in the consolidation stage was the pattern-induction task. As the teachers did not explicitly explain the grammatical rules in advance, after performing the tasks in strategies 1 and 2, teachers encouraged their students to apply the rules they learned to different sentences. Taking the sentence pattern in present progressive tense as an example, students may have practiced several statements such as “he is walking,” “she is eating,” “I am studying,” and “they are playing basketball.” The teacher encouraged the students to apply sentence pattern rules, such as a “be” verb coupled with another verb with the suffix “ing,” which means someone is doing something right now. As they had previously learned, different “be” verbs should be coupled with different subject terms. The induction task helped the learner to wrap up the content of the subject taught (e.g., different forms of the present progressive tense) in a lesson and gave them a clearer and more-concrete idea of the lesson content.

#### ***Strategy 4***

The final strategy in the P-BEST is engaging students through bite-sized learning contents, attention-drawing tasks, and take-home achievement. In the P-BEST, the above-mentioned four strategies with various tasks were designed to be completed during a 45-minute lesson, with each task lasting for 5–10 minutes depending on the degree of the mastery of the students. The short duration of exercises would facilitate the students concentrating on their tasks. Moreover, since the P-BEST employed intensive activities and game-based scenarios to help students keep an eye on tasks, it was conducive to reducing the feeling of boredom and monotony, and further enhancing their engagement in the class. Finally, students have a clear sense about their own learning progress and outcomes in each lesson, and this feeling of take-home achievement after each lesson is helpful for enhancing their motivation for future learning.

#### **Purposes of The Current Study**

The overarching purpose of the current study was to provide empirical evidence of the effectiveness of the P-BEST grammar instruction framework for low-achieving EFL learners at beginner levels. Compared with previous studies, the current intervention study had the following attributes. First, while insufficient information about the L2 learning statuses and proficiencies of their participants was provided in most previous studies, the current study specified the levels and proficiencies of learners when recruiting participants for the intervention. Low-achieving EFL beginner learners were chosen based on their performances on the Diagnostic and Certification English Competence (DCEC) test (Hu & Hsu, 2020). The clear understanding of the proficiencies and situated learning contexts of learners means that the instructional methods employed in this study not only meet low-achieving learners’ needs but also have the potential to be duplicated and transferred to other EFL contexts. Second, while most previous studies selected one or only a few grammatical structures for instruction in their experiments, this study provided a detailed description of instructional steps aiming to draw low-achieving learners’ attention to the learning contents (Robinson, 1995), arouse their consciousness of linguistic features in sentence pattern (Svalberg, 2012), and stimulate their motivation to participate in the grammar learning activity (Dörnyei & Ushioda, 2021; Mercer & Dörnyei, 2020). Besides, the grammatical structures been taught in the current study conformed to those illustrated in the national curriculum, which could be more concrete and feasible for establishing a complete grammar intervention program in schools. Third, unlike most previous



empirical studies, in which short-term interventions were devised, this study provided a comprehensive grammar intervention with a long duration of 2 years and examined its results, thus offering more-reliable instructional implications and suggestions.

## Method

### Research Design

This study employed a pretest–posttest equal-group experimental design, in which the instruction methods (P-BEST instruction vs traditional instruction) were set as the independent variables. This study examined the effects of the P-BEST on a treatment group of students who participated in the program for 2 years (in seventh and eighth grades) and compared them with a control group that did not participate in the program.

The pretest results of the four DCEC subtests on vocabulary size (DCEC-VS), listening comprehension (DCEC-LC), reading comprehension (DCEC-RC), and grammar (DCEC-G) were used as the screening tests for low-achievers (see the measurement tool section). Based on DCEC pretest scores, the low-achieving students were paired and then randomly assigned to the two instructional groups. Upon completion of the experiment, the four DCEC subtests were administered as the posttests. These posttest results became the dependent variables.

### Participants and Procedure

The participants in this study were 90 middle-school students in Taiwan. They participated in the study from September 2016 to June 2018, during their seventh and eighth grades. The numbers and sexes of participants are listed in Table 1. Students first participated in the DCEC subtests in September 2016. Based on the DCEC criteria, those who failed to reach the fourth-grade level on the test were recruited into the research sample. Despite having received at least 4 years of instruction in English at their elementary schools, the abilities of the participants were similar to those in the beginning level, with little understanding of basic phonetic rules for spelling, small vocabularies, and also insufficient abilities to construct satisfactory sentence patterns required for the level they were learning at. Considering this, researchers assigned the participants to classes with the P-BEST intervention (experimental group) and to traditional classes (control group) based on the agreement and willingness of their parents, and also based on opinions from their homeroom teachers. There were 35 and 55 students in the experimental and control groups, respectively. The duration of the experiment was 2 years (four semesters), and it comprised around 128 classes in total, each lasting 45 minutes. The DCEC-G subtest was administered to all the participants five times over the 2 years, and the five assessments were implemented in September 2016, January 2017, June 2017, January 2018, and June 2018.

**Table 1**

*Numbers and Sexes of Participants in the Experimental and Control Groups*

	Male		Female		Total
	Number	%	Number	%	
Experimental	21	60.00	14	40.00	35
Control	38	60.09	17	30.91	55
Total	59	65.56	31	34.44	90

## Measurement Instruments

The tool for pretest and posttests (DCEC-G) is a grammar test based on the national curriculum guidelines of Taiwan and the English textbooks commonly used in mainstream local schools. The DCEC was developed by the Research Center for Psychological and Educational Testing at National Taiwan Normal University. It consists of five levels, D1 to D5, which are in accordance with what is designated in the national curriculum guidelines from third to ninth grades. Based on the results from the four DCEC subtests (DCEC-VS, DCEC-G, DCEC-L and DCEC-RC) for diagnosing the English proficiency of learners, detailed information and learning suggestions that correspond to the learning performance were provided to examinees (Hu & Hsu, 2020; Hu et al., 2020). The details of test construction and their psychometrical properties are provided in Hu et al. (2020) and Hu and Hsu (2020).

## Instructional Materials

Based on the strategies and tasks employed in the P-BEST, this study designed a toolkit of instructional materials for remedial instruction of EFL grammar. The framework of the instructional contents was designed based on the textbooks used in the regular classes of seventh-grade and eighth-grade students. Since three different versions of textbooks were used by the schools in these grades, a different set of materials was designed for each version. In each instructional material set, various sentence patterns were taught that covered a range of grammatical concepts. For students in grade seven, grammatical concepts were presented in appropriately 37 sentence pattern sets. The sentence patterns focused mostly on constructions with the present simple and present continuous tenses previously taught in elementary school, and dealt with new grammatical concepts such as use of the verb “be,” auxiliary verb “do,” modal verb “can,” frequency adverbs, and also question words such as “what,” “when,” and “where” (Appendix A). As for students in grade 8, grammatical concepts were displayed in appropriately 35 sentence sets. The sentence patterns dealt with various grammatical concepts, such as past simple and past continuous tenses, future “will” and “be going to,” comparatives and superlatives, and also the use of infinitives, gerunds, and subordinating conjunctions including “when,” “if,” “because,” and “so” (Appendix B).

## Data Analysis

### *Hierarchical Linear Model*

The data gathered from students and their school types had a nested structure. This means that students studying in schools/classes of the same type might yield more similar results than the students who study at schools/classes of other types. A hierarchical linear model (HLM; Raudenbush & Bryk, 2002) was used for this study to account for the nested nature of the data. There are different regression HLMs for student groups that draw an outline by using structural relations and residual variabilities at that level. First, an unconditional (null) model without any predictor variables was tested to compute the intraclass correlation coefficients (ICCs) for estimating the degree to which variances between schools were represented in the total variation of the student model. The second step included the control variable at the student level (P-BEST instruction) in the model. The final two-level HLM was based on the following formulas:

Level 1 (student-level) model:

$$score_{ij} = \beta_{0j} + \beta_{1j} (\text{P-BEST}) + r_{ij}$$

Level 2 (school-level) model:

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + \mu_{0j} \\ \beta_{1j} &= \gamma_{10} \end{aligned}$$

Where  $score_{ij}$  is the outcome variable (the grammar score for student  $i$  in school  $j$ ),  $\beta_{0j}$  is the grammar score mean for the students of each school,  $\beta_{1j}$  is the differentiating effect of the participation of students in the P-BEST in school  $j$ ,  $\gamma_{00}$  is the mean grammar score for all schools in the sample,  $\gamma_{01j}$  is the slope of the P-BEST for student  $i$  in school  $j$ ,  $r_{ij}$  is the level-1 residual, and  $u_{0j}$  is the unique error to the intercept associated with school  $j$ , with variance  $r_{00}$ .

### ***Hierarchical Linear Growth Model***

Growth curve modeling (GCM) was used to examine the rate of change from the initial grammar status of students to the follow-up after 2 years of the P-BEST intervention. GCM is recommended for analyzing grouped (or nested) data, and also for capturing development trajectories. This study examined repeated measures across time (level 1) nested within students (level 2), and students nested within schools (level 3). Level 1 (semester) was the time-varying variable, the level-2 variable was the P-BEST intervention and grammar score at school entry, and the level-3 variable was the school. The final three-level hierarchical linear growth model was based on the following formulas:

Level 1 (time-level) model:

$$score_{ij} = \pi_{0ij} + \pi_{1ij} \text{time}_{ij} + e_{ij}$$

Level 2 (student-level) model:

$$\pi_{0ij} = \beta_{000} + r_{0ij}$$

$$\pi_{1ij} = \beta_{100} + \beta_{110} (\text{P-BEST})_{ij} + r_{1ij}$$

Level 3 (school-level) model:

$$\beta_{000} = \gamma_{000} + u_{00j}$$

$$\beta_{100} = \gamma_{100}$$

$$\beta_{110} = \gamma_{110}$$

## **Results**

This section is divided into two parts, presenting (1) descriptive information comparing each group of students on grammar score, and (2) HLM analyses examining the impact of the P-BEST on intervention effectiveness and improvement during the intervention phase.

### **Descriptive Statistics**

Table 4 summarizes the performances of students on the DCEC-G test across four waves of data collection for each semester and lists the effectiveness of the intervention as increasing grammar scores in the format of the difference-in-differences methods. At the start of the school year (September 2016), the mean initial score of the participants in their first test was 16.55 ( $SD = 10.81$ ) for the control group and 19.20 ( $SD = 12.52$ ) for the intervention group, with no significant difference. The results indicated that the students in the two groups had similar initial grammar abilities, but after 1 year of the P-BEST intervention, the grammar scores were significantly higher in the experimental group than in the control group. On average, students demonstrated extremely low levels of grammar ability at school entry and made some progress during each semester. The differences between wave 1 and the initial scores were 6.23 and 10.20 in the control and intervention groups, respectively (both  $p < .001$ ). A similar result was found during the wave-2 phase. The intervention had significantly increased the grammar scores in the intervention group, indicating that the P-BEST intervention affected the grammatical ability of the students.

**Table 2**  
*Scores at Baseline and Follow-Up in the Intervention and Control Groups*

	Test month	Control group ( <i>N</i> = 55)	Intervention group ( <i>N</i> = 35)	Difference
Initial	Sep. 2016	16.55 (10.81)	19.20 (12.52)	2.65
Wave 1	Jan. 2017	22.78 (17.58)	29.40 (19.71)	6.62
Wave 2	June 2017	29.51 (25.04)	41.20 (25.45)	11.69*
Wave 3	Jan. 2018	32.29 (29.94)	53.09 (42.45)	20.79**
Wave 4	June 2018	35.31 (39.53)	56.40 (47.21)	21.09*
Change	Wave 1–initial	6.23**	10.20***	
	Wave 2–wave 1	6.73**	11.80***	
	Wave 3–wave 2	2.78	11.89	
	Wave 4–wave 3	3.02	3.31	

\*  $p < .05$ . \*\*  $p < .01$ .

### HLM Analyses for The Differences Between Groups

One-way random-effects ANCOVA was conducted to determine the variabilities in the grammar scores of students within both the control and intervention groups. The difference in performance between the two groups of students during the experiment was examined using HLM 8 (Raudenbush et al., 2019) to examine the grammar scores of the students across three time points: initial (September 2016), wave 2 (June 2017, end of the first year of the experiment), and wave 4 (June 2018, end of the second year of the experiment).

Regarding the results of the HLM method (Table 5), the ICC values for the null model (Model 0) indicated that 13.16%, 28.02%, and 24.94% of the variance in grammar scores could be attributed to the difference between schools in the initial phase, the wave-2 phase, and the wave-4 phase, respectively. These preliminary results further imply that, for this sample, further analyses with HLMs were necessary to examine the impacts of explanatory variables at the different levels.

In the second analysis, student-level control variables were incorporated into the model (Model 1, Table 5), with the aim of identifying the efficacies of the selected explanatory variables. This section responded to the research question about the influence of student-level variance, such as whether students participated in the P-BEST intervention. For the initial phase, the results of the analysis revealed that the P-BEST intervention was not a significant predictor for the grammar score ( $\gamma_{10} = 0.54$ ,  $SE = 2.29$ ,  $p = .841$ ), which also indicated that students had similar grammatical competences according to their DCEC-G pretest scores. Similar results were found for the wave-2 phase, where the P-BEST intervention was not significantly related to grammar score ( $\gamma_{10} = 7.23$ ,  $SE = 5.24$ ,  $p = .171$ ). For the wave-4 phase, the P-BEST intervention was found to be significantly and positively related to the grammar score ( $\gamma_{10} = 11.92$ ,  $SE = 5.92$ ,  $p = .047$ ), with the experimental group having significant higher grammar scores than the control group after the 2-year experiment.

**Table 3**  
*Results for the HLMs*

		Model 0	Model 1	
		Coefficient	Coefficient	SE
Initial	Fixed effects			
	Intercept ( $\gamma_{00}$ )	19.08***	18.80***	1.97
	P-BEST ( $\gamma_{10}$ )		0.54	2.29
	Random effects			
	Student-level effect ( $\tau_{ij}$ )	114.68	116.01	

(Continued)

**Table 3**  
Results for the HLMs (Continued)

		Model 0	Model 1	
		Coefficient	Coefficient	SE
	School-level effect ( $\mu_0j$ )	17.38	17.20	
Wave 2	Fixed effects			
	Intercept ( $\gamma_{00}$ )	37.69***	33.80***	3.00
	P-BEST ( $\gamma_{10}$ )		7.23	5.24
	Random effects			
	Student-level effect ( $r_{ij}$ )	468.88	465.72	
	School-level effect ( $\mu_0j$ )	182.52	173.26	
Wave 4	Fixed effects			
	Intercept ( $\gamma_{00}$ )	48.17**	41.87***	6.02
	P-BEST ( $\gamma_{10}$ )		11.92*	5.92
	Random effects			
	Student-level effect ( $r_{ij}$ )	1467.65	1463.95	
	School-level effect ( $\mu_0j$ )	488.00	446.76	

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

### Hierarchical Linear Growth Model Analyses for Differences Within Groups

#### 1-year Phase

The analysis started with the unconditional mean model (Model 0, Table 6), which does not include explanatory variables at levels 1, 2, and 3; its purpose was to estimate the ICC. The ICC indicated that 51.2% of the variance in grammar scores could be attributed to the difference between individual students. The unconditional growth model (Model 1) aimed to determine the initial status and average improvement rate of the grammatical abilities of the students. The results indicated that the average initial status ( $\beta_{000}$ ) and average improvement rate ( $\beta_{100}$ ) of the grammar scores of the students were 19.97 ( $SE = 1.29$ ) and 8.24 ( $SE = 2.53$ ), respectively (both  $p = .01$ ). In other words, the mean initial grammar score of all the students was 19.97, and it increased by 8.24 per semester. The conditional growth model (Model 2) aimed to determine the impact of the P-BEST intervention on the initial status and average improvement rate of the grammatical abilities of the students. The mean initial grammar score of all the students was 19.35 ( $SE = 1.20$ ), and it increased by 6.53 ( $SE = 2.11$ ) per semester for both groups, but more in the experimental group, by 4.38 ( $SE = 2.20$ ) per semester.

**Table 4**  
Results for the Hierarchical Linear Growth Model

Phase	Model 0	Model 1		Model 2	
	Coefficient	Coefficient	SE	Coefficient	SE
<b>1 Year</b>					
Fixed effects					
Intercept ( $\gamma_{000}$ )	28.21***	19.97***	1.29	19.35***	1.20
Time ( $\gamma_{100}$ )		8.24**	2.53	6.53**	2.11
P-BEST ( $\gamma_{110}$ )				4.38*	2.20
Random parameters					
Time-level effect ( $\epsilon_{tij}$ )	135.25	157.89		157.57	
Student-level effect ( $r_{1ij}$ )	205.16	137.28		132.43	
School-level effect ( $\mu_{00j}$ )	60.46	60.46		56.24	
<b>2 Years</b>					
Fixed effects					

(Continued)

**Table 4**  
*Results for the Hierarchical Linear Growth Model (Continued)*

Phase	Model 0	Model 1	Model 2		
	Coefficient	Coefficient	SE	Coefficient	SE
Intercept ( $\gamma_{000}$ )	35.74***	22.36***	1.69	20.98***	1.53
Time ( $\gamma_{100}$ )		6.69**	2.31	4.82**	1.59
P-BEST ( $\gamma_{110}$ )				4.80*	1.72
Random parameters					
Time-level effect ( $\epsilon_{tij}$ )	296.26	318.63		314.73	
Student-level effect ( $r_{1ij}$ )	489.56	377.71		362.28	
School-level effect ( $\mu_{00j}$ )	136.03	136.02		121.10	

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

### 2-year Phase

The ICC of Model 0 indicated that 53.1% of the variance in grammar scores could be attributed to the difference between individual students. The coefficients of Model 1 were significant, indicating that the mean initial grammar score of all the students was 22.36, and it increased by 6.69 per semester. The results for Model 2 indicated that the mean initial grammar score of all the students was 20.98 ( $SE = 1.53$ ), and it increased by 4.82 ( $SE = 1.59$ ) per semester for both groups, but more in the experimental group, by 4.80 ( $SE = 1.72$ ) per semester.

## Discussion and Conclusions

While previous studies have adopted various approaches to examine language teaching and learning efficacies (e.g., Hu & Hsu, 2020; Lo & Chen., 2021; Tai & Chen, 2022; Tseng et al., 2019; Wang et al., 2020), and the importance of English grammar for EFL learners has been underscored by previous studies, such as a close relationships of grammar with EFL reading comprehension (Guo & Roehrig, 2011; Jeon & Yamashita, 2014; Kim & Cho, 2015; Nergis, 2013; Shiotsu & Weir, 2007; van Gelderen et al., 2003) and language production (Corder, 1988; Larsen-Freeman, 2002; Muncie, 2002), the best method for teaching grammar in EFL classes remains unclear. Researchers and teachers who support the communicative language teaching (CLT) approach tend to consider grammar teaching to be separate from (Littlewood, 2007; Underwood, 2017) or minor in (Krashen, 1985) CLT classes. Moreover, although various approaches for teaching grammar in EFL classes have been proposed (e.g., deductive and inductive approaches, Doughty & Williams, 1998), there are few programs highlighting both cognitive and affective strategies with specific types of tasks to enhance the grammatical abilities of low-achieving learners. The structured pedagogical framework for teaching grammar presented in this study offered potential instructional features (e.g., noticing and comparing target grammar, Ellis, 2002; translation skills, Masuda, 2017) as well as concrete suggestions for activity choices for low-achieving learners.

Recognizing the above-mentioned special needs of EFL low-achievers, this study proposed the P-BEST and found that after four semesters of instruction, progress was greater for the low-achieving EFL learners than for the control group. In particular, during the four semesters of EFL remedial instruction, the students receiving the P-BEST intervention demonstrated a steady and greater progress in their EFL grammar scores (i.e., DCEC-G scores) compared with those who received regular instruction. This study has provided evidence for the effects of the P-BEST, wherein the integrated strategies and tasks were employed. As mentioned above, few studies have focused on providing remedial grammar programs for middle-school EFL learners. Our findings provide supporting and encouraging evidence for constructing an effective grammar program for low-achieving EFL learners.

Another issue tackled in this study was the effect of using the inductive grammar-teaching approach in below-intermediate-level EFL classes. As noted in the introduction, the various studies investigating the effectiveness of deductive and inductive instructions of L2 grammar have produced diverse results. While some empirical studies had more-favorable results under deductive instructions (Erlam, 2003; Radwan, 2005; Robinson, 1996; Seliger, 1975; Tode, 2007), others found that inductive instructions resulted in greater improvements (Benati, 2015; Benitez-Correa et al., 2019; Haight et al., 2008; Herron & Tomasello, 1992; Tammenga-Helmantel et al., 2016; Tomasello & Herron, 1988; VanPatten & Oikkeno, 1996; Vogel et al., 2011), and in some the two instructional methods produced no statistically significant different results (Abraham, 1985; Adrada-Rafael, 2017; Hwu et al., 2014; Jean & Simard, 2013; Rosa & O'Neill, 1999; Shaffer, 1989; Tammenga-Helmantel et al., 2014). These conflicting results have been attributed to the heterogeneity of research designs, such as in the choice of participants (Haight et al., 2008), the complexity of targeted structures (Tammenga-Helmantel et al., 2016), and how learning was assessed (Hwu et al., 2014). Findings in this study supported the argument that inductive instructions were generally favored by L2 learners at beginner levels (Benati, 2015; Benitez-Correa et al., 2019; Haight et al., 2008; Herron & Tomasello, 1992; Tomasello & Herron, 1988).

There are two main reasons accounting for why inductive instructions employed in the P-BSET Program were helpful for the low-achieving learners at beginner level in this study. First of all, as grammar concepts and terminologies are generally abstruse for those who first start to learn a foreign language, instructions with rule explanations or linguistic jargon might make learning contents more challenging for the low-achievers to comprehend. Under inductive instructions, the learners can categorize grammatical rules while studying examples of language in use (Nunan, 2002). In other words, while being under inductive instruction, rather than passively listening to rule explanation, the students were rendered more opportunities to interact with sentence patterns, and further, intuitively create their own sentences both orally and in writing. Besides, inductive instructions in the P-BEST Program produce substantial opportunities for the students to exert their agency, the central concept linking autonomy and motivation (Dörnyei & Ushioda, 2021). As Hu and Hsu (2020) reminded, affective factors that might impede or even demotivate low-achieving learners should be identified prior to designing learning contents for those learners. Inductive instruction requiring learners to exert their agency (e.g., figure out rules on their own), and further, be given opportunities to use English and experience learning success through the process, which is particularly important for those who experience learning failure before.

On the other hand, considering that as low-achieving learners easily feel bored and get distracted from class (Crumpton & Gregory, 2011; Finn & Rock, 1997), providing sufficient stimuli for facilitating their engagement in the class tasks is essential. This study advocated interventional teaching approaches which could enable students to draw their attention to linguistic features (Svalberg, 2012) through an array of engaging activities. The teaching strategies employed in this study are conducive to help students attend to their tasks. For example, consciousness-raising tasks (e.g., Fotos, 1993) help learners identify the sentence patterns through intensive audio and visual exposures without receiving explicit explanations of the rules using technical terms. This short-term practice helped learners to focus on a specific rule of word orders and encode that rule in their memory. This representation was then rechecked in a subsequent translation task, in which the learner needed to recall the rules and apply them in a productive oral or writing communicative situation. This process helped the learners to consolidate the patterns/rules they had learned and provided them with opportunities to reconstruct their mal-rules based on feedback from their teachers or peers.

If the implicit/inductive and explicit/deductive approaches of grammar learning can be considered as a continuum or a spectrum (Norris & Ortega, 2000), the consciousness-raising and translation tasks may be viewed as strategies integrating the tasks constituting markedly implicit (consciousness-raising) and explicit (translation) ends of the spectrum. This integration of multiple approaches in the P-BEST (Figure 1) was found to be effective based on the different learning outcomes attained by the experimental and control groups. The results of this study provide supporting evidence for previous studies that investigated similar

issues in L2 classrooms such as in French or Spanish learning (Adrada-Rafael, 2017; Cerezo et al., 2016; Erlam, 2003; Haight et al., 2008; Herron & Tomasello, 1992; Hwu et al., 2014; Jean & Simard, 2013; Osa-Melero, 2017; Rosa & O'Neill, 1999; Shaffer, 1989; Tomasello & Herron, 1988; VanPatten & Oikkeno, 1996; Vogel et al., 2011) or which were conducted in English-speaking countries (Abraham, 1985; Radwan, 2005; Robinson, 1996; Seliger, 1975; Smart, 2014). The positive results obtained in the current study further provide solid evidence that low-achieving EFL learners can be effectively taught grammar using an inductive/implicit-oriented approach.

While the evidence presented in this study is reliable, there were some limitations. First, since it was based on an integrative approach of teaching strategies and tasks, this study did not directly contrast the effects of explicit/deductive and implicit/inductive teaching approaches. Future researchers may consider employing more-contrastive tasks in different approaches and compare their effects on low-achieving EFL students. Second, although this study attempted to employ teaching scenarios that were more game-oriented in order to engage students in their classes, the affective variables of the students, such as their motivation and engagement in different teaching interventions, were not measured and compared. Further studies could use appropriate tools to measure affective variables, which may help to provide a more-comprehensive understanding of the effects of different teaching approaches on the learning motivation and engagement of students.

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**Appendix A***Grammatical Concepts & Sentence Pattern Examples for Seventh-Graders*

Grammatical Concepts		Examples from Grade 7 Materials
1.The present simple tense	Interrogative & Declarative Sentences	A. How old are you? B. I'm thirteen years old.
	Interrogative & Negative Sentences	A. Are you a student? B. Yes, I am. I'm a student. / No, I'm not. I'm a teacher.
2.The present continuous tense	Interrogative & Declarative Sentences	A. What are you doing? B. I'm playing a game.
	Interrogative & Negative Sentences	A. Are you painting? B. Yes, I am. I'm painting. No, I'm not. I'm not painting.
3.The past simple tense	Interrogative & Declarative Sentences	A. What did they do yesterday? B. They climbed a mountain (yesterday).
	Interrogative & Negative Sentences	A. Did you visit an island yesterday afternoon? B. Yes, I did. / No, I didn't.
4.The use of the "be" verb		A. Is your place usually dirty? B. Yes, it's usually dirty. / No, it's never dirty.
		A. Does he exercise in the morning? B. Yes, he does. / No, he doesn't.
6.The use of the modal verb "can"	Interrogative & Declarative Sentences	A. What can you do? B. I can run very fast.
	Interrogative & Negative Sentences	A. Can you play basketball? B. Yes, I can. / No, I can't
7.The use of adverbs of frequency		A. Do you always do the housework in the morning? B. Yes, I always do the housework in the morning. /No, I never do the housework in the morning.
		A. What time is it? B. It's four thirty.
	<u>What</u>	Interrogative adjective
		Interrogative pronoun
	<u>Who</u>	A. Who is he? B. He's my friend.
	<u>Where</u>	A. Where are you from? B. I'm from Taiwan.
8.The use of question words	<u>Which</u>	Interro- Subject form
		gative Object form
	<u>When</u>	A. Which one is your favorite, strawberry cake or banana pie? B. Strawberry cake is my favorite.
	<u>When</u>	A. Which do you want, strawberry cake or banana pie? B. I want strawberry cake.
	<u>Why</u>	A. When is your birthday? B. It's on August seventh.
	<u>Why</u>	A. Why did he cry for days? B. He cried for days because he lost his wife.

(Continued)

**Appendix A***Grammatical Concepts & Sentence Pattern Examples for Seventh-Graders (Continued)*

Grammatical Concepts		Examples from Grade 7 Materials
8.The use of question words	How	Age A. How old is he? B. He's twenty-two years old.
		Frequency A. How often do you clean your cellphone? B. I clean my cellphone once a day.
		Price A. How much are the cookies? B. They're fifty dollars.
		Quantity A. How many eggs do you want? B. I want six eggs. A. How much juice does he have? B. He has one bottle of juice.
		Weather A. How was the weather yesterday? B. It was sunny.
9.The use of pronouns		A. What is your name? B. My name is Jack.
10.The use of prepositions	Location A. Where are the gifts? B. They're behind the box.	
	Time A. What does he do on Tuesdays? B. He plays the guitar (on Tuesdays).	
11.The use of measure words		A. How much flour do you need? B. I need two cups of flour.
12.The use of quantifiers (any/some/one/many and much/a lot of (lots of) / no)		There are a lot of storybooks in the library.
13.The use of conjunctions	and I am strong and hairy.	
	because/so A. Why didn't you sleep on the train? B. I didn't sleep because there were too many people. / There were too many people, so I didn't sleep.	
14.Presentative sentences - There be		There are some animals in the house. There aren't any animals in the house.
15.Imperative sentences	Affirmative forms Please stand up.	
	Negative forms Please don't talk.	
	Offer an invitation Let's go.	

**Appendix B***Grammatical Concepts & Sentence Pattern Examples for Eighth-Graders*

Grammatical Concepts		Examples from Grade 8 Materials
1.The past simple tense		A. What did you do yesterday? B. I watched a movie yesterday.
2.The past continuous tense		A. What was she doing then? B. She was celebrating her birthday then.
3.The future tense	will A. Will you have your first Maker Class tomorrow? B. Yes, we will. / No, we won't.	
	be going to A. What are you going to do this weekend? B. I'm going to make a key chain this weekend.	

(Continued)



**Appendix B***Grammatical Concepts & Sentence Pattern Examples for Eighth-Graders (Continued)*

	Grammatical Concepts	Examples from Grade 8 Materials
	Causative verbs	His boss made him work late.
	Confusing verbs (spend/take)	They spent three hours getting there. It took them three hours to get there.
	Dative verbs	I bought her a birthday card.
4.The use of verbs	Linking verbs	A. How does it look? B. It looks strange.
		A. What does it smell like? B. It smells like cheese.
	Modal verbs (must/should/would/ could/may/might)	We should/must (not) stay at home.
	Sense verbs	I felt the ground shake/shaking.
5.The use of infinitives		I want to take a working holiday.
6.The use of gerunds		He enjoys taking selfies.
7.The use of adjectives	Adjectives/Comparative adjectives/ Superlative adjectives	The coat is lighter than the jacket. The camera is the most valuable (thing) in the house.
8.The use of adverbs	Adverbs/Comparative adverbs/ Superlative adverbs	Ann drives more slowly than Nick.
	Adverbs of manner	She danced beautifully.
9.The use of question words	<u>What</u>	Weather A. What was the weather like in Australia? B. It was sunny and hot.
		<u>Why</u> A. Why didn't she go to the party last weekend? B. She didn't go to the party because she was sick.
	<u>How</u>	Direction A. How do we get to the train station? B. Go straight for two blocks. It's across from the bank.
		Transportation A. How does she go to her office? B. She takes a bus to her office.
		Weather A. How was the weather there? B. It was sunny and hot.
	10.The use of pronouns	Demonstrative pronouns
Indefinite pronouns		Most of the students enjoy surfing.
Reflexive pronouns		She enjoyed herself last night.
	Dative verbs + to/for	A. Did you send a card to me? B. Yes, I did. I sent a card to you. / No, I didn't. I didn't send a card to you.
11.The use of prepositions		I bought a birthday card for her.
	Position/Direction	A. Where is the train station? B. It's across from the bank.
	Transportation	A. How do you go to school? B. I go there by bus.

(Continued)

**Appendix B***Grammatical Concepts & Sentence Pattern Examples for Eighth-Graders (Continued)*

Grammatical Concepts	Examples from Grade 8 Materials
12.The use of conjunctions	When he arrived at the party, everyone was surprised.
	She washed her face before she went out.
	After I got home, I did my homework.
	If it is sunny tomorrow, he will have a picnic.
	Although/Though he was sick, he still made dinner for his children.
	I not only sang but also danced yesterday.
13.“It” as an empty subject	It is safe to travel in Taiwan.
14.Noun clauses	He believes (that) they are smart and creative.

# 透過漸進式英語句型教學計劃 (P-BEST) 提升國中英語學習 落後者的語法能力

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儘管已有很多的研究檢驗運用歸納和演繹方法在各種情境下教授第二外語文法，但鮮少有研究針對英文學習落後者使用的英語文法教學方法之效能進行檢驗。有鑑於此，本研究設計了 P-BEST 英文文法句型補救教學計劃，欲藉由計畫執行，提升英文學習落後者的英語文法句型能力。本研究採用前後測等組實驗設計，實驗時間為兩年（四個學期）。本研究共招募 90 名未能通過 DCEC 分測驗的學生。實驗組 35 名學生接受了 P-BEST 教學介入，而對照組 55 名學生則是接受傳統教學。結果顯示，P-BEST 教學介入與英語文法句型分數呈現顯著正相關。此外，結果亦顯示，經過兩年的教學實驗，實驗組的英語文法句型分數明顯高於對照組。此結果亦為歸納 / 內隱導向教學方法可有效地提升英語學習落後者文法句型能力提供了確切的證據。透過清楚了解學習者的語言程度及其所處的學習環境，P-BEST 計劃中使用的文法句型教學策略可以複製並轉移到其他 EFL 學習環境中。

**關鍵詞：**低成就英語學習者、歸納式教學、文法教學、補救教學

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