

Processing instruction in helping map forms and meaning in L2 acquisition of English simple past

Abstract

In phase one of this study, how English simple past is being taught in the classroom was examined through a questionnaire. Findings reported how primary and secondary teachers perceived the difficulties faced by Cantonese ESL learners when acquiring English simple past, and the dominant teaching approaches/strategies used to address the problems. The second phase of the study examined the role of explicit instruction versus implicit instruction by involving primary 2 students being taught using 3 different forms of pedagogical intervention: Processing Instruction group (PI); Traditional Instruction group (TI); Implicit Instruction Group (II). Findings show that the PI group had significant improvement from pre-test to post-test in the interpretation task, and they also obtained the greatest gains. In the production task, both PI and TI groups obtained greatest gains and their improvement was significant. Explicit instruction was found to be more effective than implicit instruction in L2 acquisition of English simple past.

Keywords: Classroom intervention; English simple past; explicit/implicit instruction; second language acquisition

Introduction

Tense marking is regarded as a major problem for L2 learners across different languages, particularly when the L1 tense marking system is different from L2 (Sagarra & Ellis, 2013; Ambridge, Pine & Lieven, 2014; Ayoun, 2015; Slabakova, 2015; Housen & Simoens, 2016). Different accounts have been put forward to explain the situation, which seem to be related to the principle and essence of Input Processing (IP) (VanPatten, 2002, p. 757):

That learners are driven to get meaning from input has a set of consequences, the first being that words (content lexical items) are searched out first.....when content lexical items and a grammatical form both encode the same meaning and when both are present in a sentence/utterance, it is the lexical item that learners attend to.....

This is known as the Lexical Preference Principle. In acquiring English simple past when both the ending *ed* and the temporal adverbials encode past meaning, L2 learners tend to rely on temporal adverbials instead of verb inflections to mark temporality (e.g. Tong et al., 2014). Concerning incorrect tense marking, there seems to be a universal account claiming that learners mark verbs that are lexico-semantically more event-like for tense first, and then mark increasingly less event-like verbs in stages (Robison, 1995), known as the Aspect Hypothesis.

In Author (2013), however, Cantonese ESL learners were found to have an underlying knowledge of tense, and the availability of Tense Phrase (TP), but they have difficulty in mapping forms and meaning. This study is divided into 2 phases. The first phase examines how English simple past is being taught and learned in Hong Kong, followed by the second phase where the role of explicit instruction (i.e. traditional instruction and processing instruction) versus implicit instruction is

investigated to determine which form of pedagogical intervention can help L2 learners map both form and meaning in acquiring English simple past.

Background

The role and status of grammar in language learning and teaching has been a subject of debate for a long time. For much of the 16th to the 19th centuries, the teaching of a language meant primarily the teaching of its grammar to develop students' linguistic competence. Grammar thus played a central role in language education and constituted the subject matter that students learned at school. The role of grammar was lessened since the introduction of communicative language teaching in the 1970s (Widdowson, 1978), which emphasizes communicative fluency rather than linguistic accuracy. In recent years, however, the importance of grammar has been reinstated and a number of studies have shown that grammar teaching can facilitate the acquisition of language, especially second language acquisition (e.g. Ferris, 2016).

According to Wu (2006), in the period after World War II, the grammar-translation method and the direct method were two major teaching methods in Hong Kong. Grammar teaching is a traditional academic style of teaching focusing on grammar explanation and translation as a teaching technique (i.e. form-focused). It is a presentation-practice-production (PPP) process where learners are presented with a grammatical structure, do practice and expected to produce the target structure in both spoken and written discourse. This grammar teaching approach has been condemned in the literature for two main reasons. In terms of practicality, there are studies showing that students do not necessarily learn what they are taught, and that practice does not make perfect or even lead to improvement. Based on underlying language acquisition theory, second languages

are best learned through communicative activities (input-based or output-based), which is the same way as how first languages are acquired.

The oral-structural approach was advocated in the 1970s, followed by an introduction of communicative language teaching in the 1980s. Since then, there has been a tendency to focus on communication in terms of the curriculum design. Grammar teaching regained attention in the 1990s as a result of students making many grammatical mistakes in their writing. A task-based learning approach advocated in late 1990s encourages teachers to provide learners with opportunities to encounter the target grammatical structure naturally (e.g. Nunan, 2004). Form-function mapping which is regarded as instrumental in second language acquisition (e.g. MacWhinney, 1997; Robinson, 2002; Ortega, 2014) is made possible because of the contextualized and communicative nature of the tasks involved in a task-based language teaching approach (Richards & Renandya, 2002).

Some researchers agree with the idea of (meaningful) practice only for “input” processing. According to VanPatten & Cadierno (1993), grammatical structures are best learned when learners have the opportunities to process the input (to make form-meaning connections) and turn them into intake, instead of producing the form. This is known as processing instruction (PI), which is an explicit type of instruction which helps learners alter the process and strategies of processing input. This is in contrast with the traditional type of instruction which concerns explicit explanation of grammatical items and requires learners to produce the target form.

Whether instruction is effective and if explicit or implicit instruction is better has been discussed widely in the literature. A major review of the effects of instruction was conducted by Norris and Ortega (2000) who carried out a meta-analysis that identified 250 relevant studies. 77 of these studies could be classified in terms of instructional types: (a) explicit instruction – an approach to

teaching that favors explicit rule explanation that focuses on forms and the derivation of rules; (b) implicit instruction – an approach that allows acquisition of the target language to “take ... place naturally, simply and without conscious operations” (Ellis *et al.*, 2006, p. 340); (c) focus on meaning; (d) focus on ‘form’: “overtly draws students’ attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication.” (Long 1991, pp. 45-46); (e) focus on ‘formS’: “focus on formS is limited to a focus on formal elements of language, and focus on meaning excludes it (Doughty & Williams, 1998, p.4). In examining the overall effect of instruction, and the relative effects of implicit or explicit instruction, it was found that explicit instruction has a clear advantage over implicit types of instruction. The relative effectiveness of the instructional types identified is as follows: explicit focus on form (large effect) > explicit focus on formS (large effect) > implicit focus on form (medium effect) > implicit focus on formS (small effect). Empirical studies conducted in the 21st century also report the effectiveness of explicit instruction on both written and spoken grammatical competence of ESL learners (e.g. Wu, 2007; Tamayo, 2010; Nazari, 2013; Tavakoli, Dastjerdi & Esteki, 2011; Nezakat-Alhossaini, Youhanaee & Moinzadeh, 2014; Gardaoui & Farouk, 2015) through a comparison of the post-test results.

PI, which is an explicit form of pedagogical intervention, was developed based on VanPatten’s research about learners’ input processing strategies (IP), with one of the principles concerning learners’ attention to words and content lexical items for the meaning instead of grammatical form when both encode the same meaning and exist in a sentence. This is known as the Lexical Preference Principle. In the case of L2 acquisition of English simple past, there are time adverbials that encode past tense meaning, and thus L2 learners will simply use them instead of grammatical markers of tense. In order to help learners map forms and meaning, PI has the following features:

- 1 Explicit information about a linguistic form or structure is presented to the learners.

- 2 Explicit information about a particular IP strategy adopted by L2 learners which negatively affects the acquisition of the form or structure is presented to the learners
- 3 Structured-input activities (covering both referential and affective activities) are used in a way that can help learners attend to both forms and meaning.

Cadierno (1995) studied the acquisition of the English simple past and how processing instruction could help learners make form-meaning connections. This was done by taking away temporal adverbs (like *yesterday*) to divert learners' attention to the verb endings as tense markers. Assessment tasks in the study included an interpretation task of simple sentences (some in English simple present and some in English simple past) without temporal adverbs, requiring the participants to listen to sentences and then indicate if what they heard was in simple present or simple past. There was also a production task requiring participants, with cues given, to fill in the blanks with the correct form of verbs. The results demonstrated that the group that received processing instruction (PI group) performed significantly better in assigning tense to input sentences when adverbials were absent. The other two groups, a control group and a traditional (TI) group, however, did not. In the production task, the PI and TI groups both improved significantly and no significant differences were found between them. These results suggest the superior effect of PI in helping learners interpret sentences correctly while attending to form (i.e. mapping of forms and meaning).

Interest in this area has grown in the last 20 years and a number of studies have been conducted to examine at least 15 structures (e.g. simple past: VanPatten & Cadierno (1993); future: Benati (2001); present continuous: Buck (2000); passive voice (Benati et al. 2010)) in at least 7 languages, with mainly college students, and some high school learners, and in one study primary school students.

Findings generally showed a significant improvement in the post-test results of the PI group in both forms and meaning compared with two other groups. Processing instruction seems to be effective regardless of the L1s of the participants. When compared with output-meaning instruction, processing instruction was also found more effective. Output meaning instruction consists of two characteristics, as described by Lee & VanPatten (1995: 121), 1) learners are asked to be involved in activities which require the exchange of previously unknown information; 2) learners are asked to access a form or a structure with the intent to express meaning. Benati (2009) reported that processing instruction showed an advantage over meaning-output instruction; the processing group performed significantly better than meaning-output group in the interpretation task and the two groups improved equally in the production task. Benati (2010) investigated the effects of processing instruction on both discourse-level and sentence-level interpretation tasks. The results showed that the processing group's performance was significantly better than that of traditional instruction in the above two interpretation tasks.

This study first examines how English simple past is being taught and learned in Hong Kong from the perspective of local primary and secondary teachers in Phase 1 of this study. The effectiveness of explicit instruction (i.e. traditional instruction and processing instruction in this study) versus implicit instruction was then investigated with 3 groups of primary 2 students (a total of 66 students). The study aims to achieve the following objectives:

- to examine the teaching approaches used to teach English simple past in the primary and secondary classrooms, and if there might be differences, and why
- to determine if processing instruction is effective in helping Cantonese ESL learners acquire English simple past, and in what way it can help map forms and meaning

- to compare the effectiveness of explicit and implicit instruction, and its pedagogical implications.

The findings of the study are highly significant to both SLA researchers and language teachers, suggesting how teachers can select appropriate teaching approaches and why (and how) English teaching should be grounded more firmly on linguistic principles.

Methodology

This study first examined how English simple past is being taught and learned in Hong Kong from the perspective of local primary and secondary teachers (Phase 1). The effectiveness of processing instruction was then investigated to determine if and how it can address the problems faced by Cantonese ESL learners in acquiring English simple past (Phase 2).

Procedures

Phase 1

The first phase of the study started in January and February 2012, and subsequently in May and June of 2014. Two questionnaires were prepared for teachers in both primary and secondary schools in Hong Kong. Finally, 82 questionnaires were received from 55 primary schools and 51 questionnaires from 30 secondary schools. They all signed a consent form agreeing to participate in this study.

The purpose of the questionnaires is to examine how English simple past is being taught and learned in Hong Kong from the perspective of local primary and secondary English teachers. The

two questionnaires were designed in the same format eliciting information in 3 sections concerning participants' personal information, what they perceived are the difficulties faced by Cantonese ESL learners when acquiring English simple past, frequency of using 12 different teaching approaches, and details about their use of specific teaching activities and strategies. A pilot study was first conducted involving 10 primary and secondary teachers. The reliability and validity of the questionnaire were also examined. Results showed that reliability (Cronbach's Alpha = 0.7, $0.6 > 0.6$) and validity (KMO = 0.7, $0.6 > 0.5$) of the questionnaire were substantiated. For the reliability and validity of the qualitative data, a rigorous inductive approach was adopted. The qualitative data were collated and analyzed as follows:

-Independent parallel coding: First, the research assistant of this project coded and categorized the data, while the researcher also categorized the data.

-Specialist check: In order to ensure the credibility of the data analysis, two checkers specializing in second language teaching were invited to scrutinize the categorization and accuracy of data analysis.

There were 2 open-ended questions in Part III of the questionnaire in Phase 1 of the study, one about teachers' perception of students' difficulties in acquiring English simple past, which may be related to their use of teaching approaches, and the other the strategies/teaching approaches adopted by teachers to help students. Based on the findings in the literature concerning L2 learners' difficulties in acquiring English simple past, 4 codes were developed indicating the 4 main difficulties related to the: (a) lexical form; (b) usage; (c) use of temporal adverbials; and (d) L1 role. Based on these codes, key words are searched for in the qualitative data, and generate what teachers perceived are the main difficulties students encountered when acquiring English simple past. Regarding the teaching strategies suggested by teachers, three main codes were adopted based

on the classification in the literature: (a) focus on form (i.e. both form and meaning); (b) focus on formS (excluding meaning); and (c) focus on meaning.

Phase 2

Phase 2 of the study aims to examine the effectiveness of pedagogical intervention using Tradition Instruction (TI); Processing Instruction (PI); and Implicit Instruction (II) involving 3 experimental groups of primary 2 students aged 9-10 from St. Clement primary school in Hong Kong. There were a pre-test before classroom intervention and then an immediate post-test right after the last lesson. Both interpretation and production tasks were included.

A pre-test was first administered and students who obtained a score of 60.0% or below in two tasks were included. There were 66 students assigned to one of the three groups randomly: processing instruction group (N=21), traditional instruction group (N=24), implicit instruction group (N=21). They were taught for 1.5 hours each day for a total of 4.5 hours in 3 consecutive days. Because of the curriculum constraint, no delayed post-tests could be arranged. The experimental groups were taught by three different teachers to avoid the Hawthorne effect, or so-called ‘observer effect’ which is the modification of behaviour by the students who might be aware of being observed. Three teachers were trained for the PI (processing instruction), TI (traditional instruction) and II (implicit instruction) groups and they were convinced that they were doing something that has a high likelihood of success.

Description of three forms of pedagogical intervention and teaching materials

A total of 15 activities were developed for each form of pedagogical intervention. They were balanced and comparable in terms of the difficulty of vocabulary, the number of activities and verb tokens. The following describes the features of each, and how one is different from another.

Processing instruction (PI)

Processing instruction consists of grammatical explanation of English simple past and structured input activities to alter the way L2 learners process input and assist them in making form-meaning connections. Explicit instruction was given to remind learners not to rely on temporal adverbials to decide when the activities take place but pay attention to the endings of verbs.

The structured input activities used in this study included both referential and affective activities. Referential activities are activities requiring a right or wrong answer and participants have to rely on the target form to access the meaning. Following referential activities, learners are engaged in affective activities in which they can express opinions, beliefs or some other affective responses, and process information about the real world. The purpose is to provide learners with more opportunities to see or hear the form in a meaningful context. Please refer to details in Figure 1.

Referential activities:

Your classmate Bill is not good at English. Listen to the following sentences about how to improve Bill's English and decide whether Bill did the activities when he was in primary school or does the activities at present.

	He...	at present	in primary school
(1)	watches English movies.	_____	_____
(2)	listened to English news.	_____	_____

Affective activities:

Last term

Moon Chan (celebrity kid) is a child star in TVB and she is studying in secondary school. Read the following statements and decide if you also did similar things last term. Then guess who probably did each thing, your partner, your brother or your sister.

	She...	I	my partner	my brother	my sister
(1)	lived with her parents.	_____	_____	_____	_____
(2)	started to learn how to dance.	_____	_____	_____	_____

Figure 1. Referential and affective activities

Traditional instruction

Traditional treatment consists of grammatical explanation of English simple past and a set of form-focused activities. Learners are given explicit information about English simple past focusing on the forms: mechanical drills; meaningful drills and communicative drills (see Figure 2 for examples). According to Lee & VanPatten (2003), mechanical drills do not require learners to attend to meaning and there is only one correct response to the question. Mechanical drills are mainly exemplified as repetition, substitution and transformation activities. To complete meaningful drills successfully, the learner has to process the meaning of both the stimulus and

Implicit instruction

In implicit instruction, learners do not receive any explicit explanation of grammatical rules about English simple past. Learners are exposed to different passages with the use of English simple past. They first listen to the passages, read them and are then required to answer questions to check their understanding of the passages (See Figure 3).

Activity 15

1. Listen to a story named “Smart Mice”.
2. Read what you have heard.

Once upon a time, there was an old woman. She lived in a small house but there were a lot of mice. One day, she bought a cat from a friend for \$100. She loved the cat.

One night, the mice talked to each other. One of them said, “Let’s tie a bell around the cat’s neck when she’s sleeping.” Another mouse said, “Good. When the cat comes, we can hear the bell.”

The next day, when the cat was in bed, the mice tied a bell around the cat’s back. They were very happy. They played, danced and ate in the old woman’s house.

3. Answer the following questions.

(1) Where did the old woman live?

(2) What were in the old woman’s house?

Figure 3. Examples of teaching materials for the Implicit Instruction group (II)

Pre-test and post-tests

A pre-test was given to the learners one week before the lessons and a post-test immediately after the lessons. The pre-test and post-test consisted of five tasks (both interpretation and production tasks): sentence-level interpretation task, two discourse-level interpretation tasks, a fill-in-the-blanks task and a sentence creation task to determine the participants' ability of producing sentences using English simple past.

The statistical significance of the test was analysed by Analysis of variance (ANOVA). One-way ANOVA was conducted to examine if participants in different groups improved significantly from the pre-test to the post-test. A repeated two-way ANOVA on the raw scores was performed, in order to determine the possible effects of processing instruction on the way participants interpreted sentences in the interpretation task, and the way they produced sentences using English simple past. The extent of significance was then measured by effect size, which was classified as small, medium and large influence level with critical thresholds of *d*-values (Cohen, 1988, 1994; Kirk, 2001). It was an objective judgment about the extent of influence of each instruction type on respective interpretation and production tasks in the post tests. All statistical analyses were conducted by IBM SPSS Statistics 24.0.

Results

Results of Phases 1 and 2 of the study are reported in this section. The former concerns what teachers perceived students problems are in acquiring English simple past, and how it is being taught and learned in local primary and secondary schools accordingly. The second part of the study examines the role of explicit instruction, specifically processing instruction and traditional instruction, and implicit instruction in L2 acquisition of English simple past.

Phase 1

What teachers perceived students' problems are in LEARNING and USING English simple past

There are two open-ended questions in part III of the questionnaire, one about the difficulties involved in LEARNING simple past tense, and the other one about USING simple past tense. Their perception about students' problems in learning and using simple past tense seems very similar.

Based on the codes developed, which are (a) lexical form; (b) usage; (c) use of temporal adverbials; and (d) L1 role, keywords were searched for in the qualitative data, as outlined in Table 1. Lexical form concerns problems such as the production of regular and irregular simple past forms, and also the difficulties involved in producing negative and interrogative questions using English simple past. Usage is about the use of English simple past, whether the teachers think students know how and when to use English simple past. Another problem concerns the use of temporal adverbials, and L1 role relates to L1 difference which might have shaped the learning outcome.

Lexical form	Usage	Temporal adverbials	L1 role
spelling	use	time phrase	concept
form	know/when	temporal adverbials	Chinese, Cantonese,
verb	alert/aware		mother/first language
regular	confuse/mixed		
irregular			

Table 1. Coding of the problems teachers believed students have when learning and using English simple past

According to both primary and secondary teacher participants, in LEARNING English simple past, there are four main difficulties encountered by their students: (1) form, both regular and irregular forms (59.7% primary teachers and 72.5% secondary teachers); (2) usage (46.3% primary teachers and 39.2% secondary teachers); (3) use of temporal adverbials; (4) lack of past tense concept (18.2% primary teachers and 9.8% secondary teachers). Regarding the use of temporal adverbials, while secondary teachers (75.0%) complain about students' over-reliance on past tense markers, most primary teachers (70.0%) believe that students should use them. In USING English simple past, just above half of both primary (56.1%) and secondary teachers (54.9%) believe that students do not know when to use English simple past, meaning that they forget to use simple past (26.9% (i.e. 14/52 tokens) primary and 21.8% (i.e. 7/32 tokens) secondary), confuse it with other tenses (25.0 (i.e. 13/52 tokens) primary and 37.5% (i.e. 12/32 tokens) secondary) and do not use it consistently in writing (about 10.0% (5/52 tokens) of primary and secondary teachers (3/32 tokens). Extracts of the relevant problems are listed in Table 2 and the corresponding figures shown in Tables 3 to 6.

Codes	Extracts
Lexical	<ol style="list-style-type: none"> 1. “They don’t know the spelling forms of the irregular verbs.” 2. “They are not familiar with the verb tables, especially irregular verbs.” 3. “They do not memorize the verb tables.”
Usage	<ol style="list-style-type: none"> 1. “Cannot know when to use simple past (for less able students)” 2. “They don’t aware when should they use it.” 3. “They learn perfect tense later on sometimes they got confused with the two.”
Temporal adverbials	<ol style="list-style-type: none"> 1. “The meaning of past tense is closely related to time indicators. In authentic cases, the time indicators were not shown in every line in a paragraph.” 2. “If no obvious time words provided, they come across problems in answering the questions.” 3. “In primary schools, students were probably given too many drilling on forms. They were taught to change the verb into past tense when they see the time adverbial such as <i>yesterday</i> and <i>two days ago</i> without really understanding why past tense should be applied.”
L1 role	<ol style="list-style-type: none"> 1. “Because much tense and much concept, is missing in their L1, it’s hard for them to accommodate this concept into their mind.” 2. “1st language interference: we don’t have past tense in Chinese / Cantonese.” 3. “For Chinese students, their problem is there is not such a thing as ‘past tense’ in Chinese words. It’s already very difficult to learn the verbs.”

Table 2. Extracts concerning what teachers perceived students’ problems are in acquiring English simple past

No.	Teachers' perception of students' problems in LEARNING English simple past	Sum of teachers	Percentage of teachers	Subcategories	Number of tokens	Total tokens	Percentage
1	Students have problems in learning the form of English simple past	49/82	59.76%	Regular and irregular forms	28	53	52.83%
				Irregular forms	15		28.30%
				Pronunciation	5		9.43%
				Confusion	3		5.66%
				Negative forms	2		3.77%
2	Students have problems in learning the usage of English simple past	38/82	46.34%	Knowledge of when to use English simple past	19	44	43.18%
				Forget to use	10		22.73%
				Confusion between past and other tenses	10		22.73%
				Inconsistency in using	5		11.36%
3	Students have problems in using temporal adverbials	13/82	15.85%	No using of temporal adverbials or key words	9	13	69.23%
				Over-reliance on temporal adverbials or key words	4		30.77%
4	Lack of past tense concept (L1 influence, cultural differences)	15/82	18.29%				

Note: 1. Majority of teachers listed more than one students' problem in using English simple past, and different teachers gave different number of tokens so that the total number of tokens are more than teachers. In order to compare on an equal basis, the number of teachers, 82, is chosen as the base number.

Table 3. Primary teachers' perception of students' main problems in LEARNING English simple past (can give more than one answer)

No.	Students' problems in LEARNING English simple past	Sum of teachers	Percentage of teachers	Subcategories	Sum of teachers	Percentage of teachers	Number of tokens	Total tokens	Percentage
1	Students have problems in learning the form of English simple past	37/51	72.55%	Forget form	1	1/51 = 1.96%	1	40	2.50%
				Form	14	14/51 = 27.45%	16		40.00%
				Irregular form	16	16/51 = 31.37%	17		42.50%
				Forming negative and interrogative sentences	4	4/51 = 7.84%	4		10.00%
				Spelling	2	2/51 = 3.92%	2		5.00%
2	Students have problems in learning the usage of English simple past	20/51	39.22%	Forget to use	3	3/51 = 5.88%	4	21	19.05%
				Don't know when/how to use	6	6/51 = 11.76%	6		28.57%
				Confusion between past and other tenses	10	10/51 = 19.61%	10		47.62%
				Inconsistency in using	1	1/51 = 1.96%	1		4.76%
3	Students have problems in using temporal adverbials	4/51	7.84%	No using of temporal adverbials or key words	1	1/51 = 1.96%	1	4	25.00%
				Over-reliance on temporal adverbials or key words	3	3/51 = 5.88%	3		75.00%
4	Lack of past tense concept (L1 influence, cultural differences)	5/51	9.80%						

Note: 1. Majority of teachers listed more than one students' problem in using English simple past and different teachers gave different number of tokens so that the total number of tokens are more than teachers. In order to compare on an equal basis, the number of teachers, 51, is chosen as the base number.

Table 4. Secondary teachers' perception of students' main problems in LEARNING English simple past (can give more than one answer)

No.	Students' problems in USING English simple past	Sum of teachers	Percentage of teachers	Subcategories	Number of tokens	Total tokens	Percentage
1	Students have problems in learning the form of English simple past	42/82	51.22%	Regular and irregular forms	29	43	67.44%
				Irregular forms	9		20.93%
				Pronunciation	3		6.98%
				Not aware of the presence of verbs	2		4.65%
2	Students have problems in using English simple past	46/82	56.10%	Knowledge of when to use English simple past	20	52	38.46%
				Forget to use	14		26.92%
				Confusion between past and other tenses	13		25.00%
				Inconsistency in using	5		9.62%
3	Students have problems in using temporal adverbials	14/82	17.07%	No using of temporal adverbials or key words	12	14	85.71%
				Over-reliance on temporal adverbials or key words	2		14.29%
4	Lack of past tense concept (L1 influence, cultural differences)	7/82	8.54%				

Note: 1. Majority of teachers listed more than one students' problem in using English simple past and different teachers gave different number of tokens so that the total number of tokens are more than teachers. In order to compare on an equal basis, the number of teachers, 82, is chosen as the base number.

Table 5. Primary teachers' perception of students' problems in USING English simple past (can give more than one answer)

No.	Students' problems in USING English simple past	Sum of teachers	Percentage of teachers	Subcategories	Number of tokens	Total tokens	Percentage
1	Students have problems in learning the form of English simple past	25/51	49.02%	Form	11	33	33.33%
				Irregular form	9		27.27%
				Pronunciation	3		9.09%
				Spelling	7		21.21%
				Forming negative sentences	2		6.06%
				Forget to use proper form	1		3.03%
2	Students have problems in using English simple past	28/51	54.90%	Forget to use	7	32	21.88%
				Don't know when/how to use	10		31.25%
				Confusion between past and other tenses	12		37.50%
				Inconsistency in using	3		9.38%
3	Students have problems in using temporal adverbials	6/51	11.76%	No using of temporal adverbials or key words	1	7	14.29%
				Over-reliance on temporal adverbials or key words	6		85.71%
4	Lack of past tense concept (L1 influence, cultural differences)	8/51	15.69%				

Note: 1. Majority of teachers listed more than one students' problem in using English simple past and different teachers gave different number of tokens so that the total number of tokens are more than teachers. In order to compare on an equal basis, the number of teachers, 51, is chosen as the base number.

Table 6. Secondary teachers' perception of students' problems in USING English simple past (can give more than one answer)

How English simple past is being taught in primary and secondary classrooms in HK

In Part II of the questionnaire, teachers were asked to indicate how often they use the teaching activities shown to teach English simple past by circling a corresponding number representing the frequency in a likert scale (with 1 indicating very frequently, 2 frequently, 3 sometimes, 4 seldom and 5 never).

There were 12 activities included in the two questionnaires which can be categorized into form-focused, meaningful, communicative, task-based and processing. As shown in Table 7, primary teachers tend to use task-based (a mean of 3.6) and processing instruction (3.8) significantly less frequently ($p < 0.05$) than other means, which included form-focused (2.7), meaningful (2.6) and also communicative activities (2.5). Such is the case for secondary teachers. Task-based (mean=3.4) and processing instruction (mean=3.8) were used significantly less ($p < 0.05$) than other three teaching approaches: form-focused (2.6), meaningful (2.3) and communicative activities (2.9) (See Table 8). Since teachers might not be familiar with the terminology like form-focused or meaningful activities, examples of activities were shown requiring teachers to indicate their frequency of using such activities.

Strategies	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% <i>CI</i>	
					Lower Bound	Upper Bound
<i>Form-focused</i>	162	2.66	1.132	0.089	2.48	2.84
<i>Meaningful</i>	164	2.64	1.056	0.082	2.48	2.80
<i>Communicative</i>	164	2.46	1.029	0.080	2.30	2.62
<i>Task-based</i>	162	3.63	1.086	0.085	3.46	3.80
<i>Processing</i>	327	3.76	1.049	0.058	3.64	3.87
<i>Total</i>	979	3.15	1.208	0.039	3.07	3.22

Note: Frequency: 1 = Very frequent. 2 = Frequent. 3 = Sometimes. 4 = Seldom. 5 = Never.

Table 7. How English simple past is being taught in primary classrooms in Hong Kong

Strategies	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% <i>CI</i>	
					Lower Bound	Upper Bound
<i>Form-focused</i>	104	2.61	1.1271	0.1105	2.387	2.825
<i>Meaningful</i>	104	2.25	1.0681	0.1047	2.042	2.458
<i>Communicative</i>	104	2.93	0.9271	0.0909	2.752	3.113
<i>Task-based</i>	104	3.44	1.2134	0.1190	3.206	3.678
<i>Processing</i>	208	3.77	0.9489	0.0658	3.644	3.904
<i>Total</i>	624	3.13	1.1915	0.0477	3.036	3.223

Note: Frequency: 1 = Very frequent. 2 = Frequent. 3 = Sometimes. 4 = Seldom. 5 = Never.

Table 8. How English simple past is being taught in secondary classrooms in Hong Kong

In Part III of the questionnaire, teachers indicated the teaching activities used to teach English simple past. 59.0% of the primary teachers claimed that they used the traditional teaching approach and 40.0% and 19.0% task-based and processing instruction respectively. In the case of secondary schools, 53.0% teachers claimed using the traditional teaching approach, 45.0% task-based and 14.0% processing instruction. Traditional instruction seems to be used more frequently by teachers compared with task-based and processing instruction. It seems that teachers focus on output more than input.

Regarding strategies used by teachers, there was an open-ended question in Part III of the questionnaire requiring teachers to report the strategies used to help students learn English simple past. Among the 18-20 strategies suggested by both primary and secondary teachers, form-focused activities (i.e. focusing on linguistic forms excluding meaning) seem to be the most dominant favored by most primary (54.2%) and secondary school teachers (43.9%), for example, using verb tables, drilling on past tense forms, dictating and reciting past tense forms and so forth. In contrast, fewer primary and secondary teachers adopted strategies that focus on meaning (32.6% primary teachers vs 31.9% secondary) and on form (i.e. form and meaning) (10.6% primary vs 13.0% secondary) (please refer to Tables 9-10).

<i>Classification</i>	<i>Strategies used to help students learn English simple past</i>	<i>Sum of teachers¹</i>	<i>Percentage of teachers</i>	<i>Subcategories</i>	<i>Number of tokens</i>	<i>Total tokens</i>
<i>Focus on formS</i> (54.2%)	Exercises on the past tense forms	27/82	32.93%	General drilling	7	33
				Regular and irregular forms (including categorizing them)	6	
				Spelling	6	
				Reciting past tense forms	5	
				Transformation	4	
				Fill-in practice/sentence writing	3	
				Pronunciation	1	
				Match the forms of past tense	1	
	Highlighting time markers	27/82	32.93%			27
	Highlighting the past tense forms	12/82	14.63%			12
Using verb tables	20/82	24.39%			20	
Error correction	11/82	13.41%			11	
Comparison of present tense and past tense forms	11/82	13.41%			11	
Translation	2/82	2.44%			2	
Games focusing on past tense forms	7/82	8.53%			7	
<i>Focus on meaning</i> (32.6%)	Communicative activities	26/82	31.71%			26
	General games	4/82	4.88%			4
	Using timeline	11/82	13.41%			11
	Providing contextual information	31/82	37.80%	Listening or reading stories, passages, diaries or sentences	23	33
				Context	5	
			Story telling	4		
			Authentic materials	1		
<i>Focus on form (i.e. form and meaning)</i> (10.6%)	Writing Practice	13/82	15.85%			13
	Explanation of both forms and meanings of English simple past	9/82	10.98%	Explanation of meaning	4	11
				Explanation of form and meaning	3	
				Explaining the exceptions (like the cases of not using English simple past)	2	
				Explanation of form	1	
				Explanation of usage	1	
<i>Others</i> (2.6%)		6/82	7.32%	A “warming up” exercise to review past tense from time to time	1	6
				Reminding students to use past	1	

tense in writing tasks	
Teaching and explaining “to infinitive”	1
Evaluation (quiz and test)	3

Note: ¹ Majority of teachers listed more than one teaching strategy and different teachers gave different numbers of tokens so that the total number of tokens is more than that of teachers. In order to compare on an equal basis, the number of teachers, 82, is chosen as the base number.

Table 9. Strategies primary teachers used to help students learn English simple past (can suggest more than one strategy)

<i>Classification</i>	<i>Strategies adopted to help students learn English simple past</i>	<i>Sum of teachers</i>	<i>Percentage of teachers</i>	<i>Subcategories</i>	<i>Number of tokens</i>	<i>Total tokens</i>
<i>Focus on formS</i> (43.9%)	Training on forms	30/51	58.82%	Dictation	7	43
				Drilling	9	
				Fill-in blanks	2	
				Exercises on form	14	
				Verb table	11	
	Error correction	9/51	17.65%			9
	Highlighting time markers	6/51	11.76%			6
	Comparison of present tense and past tense forms	5/51	9.80%			5
	Exploring grammatical rules	5/51	9.80%			5
<i>Focus on meaning</i> (31.9%)	Communicative activities	9/51	17.65%			9
	Speaking	1/51	1.96%			1
	Games, songs, videos	4/51	7.84%			4
	Using timeline	7/51	13.73%			7
	Context (including authentic materials)	17/51	33.33%			17
	Reading practice	3/51	5.88%			3
	Use Readers to teach	1/51	1.96%			1
	Story-telling	2/51	3.92%			2
<i>Focus on form (i.e. form and meaning)</i> (13.0%)	Writing Practice	15/51	29.41%			15
	Task-based instruction	3/51	5.88%			3
<i>Others</i> (5.8%)		8/51	15.68%	Evaluation	4	8
				Underline connectives	1	
				Frequent recap	1	
				Ask students to review their own work	1	
				Giving detailed feedback	1	

Note: ¹ Majority of teachers listed more than one teaching strategy and different teachers gave different numbers of tokens so that the total number of tokens is more than that of teachers. In order to compare on an equal basis, the number of teachers, 82, is chosen as the base number.

Table 10. Strategies secondary teachers used to help students learn English simple past (can suggest more than one strategy)

Though both primary and secondary teachers agree that they should focus on both the forms and meanings in teaching English simple past (a mean of 3.7 for primary teachers and 3.3 secondary teachers in Part II of the questionnaire: 4-5 meaning *agree* and *strongly agree* respectively), the use of processing instruction involving referential and affective activities is almost absent. Nevertheless, they agree that the present approach of teaching English simple past should be improved (a mean of 3.7 for primary teachers and 3.3 for secondary teachers).

Phase 2

Findings from Phase 1 of the study shows that local teachers in Hong Kong do not seem to have heard of processing instruction, and their teaching approach tends to be quite form-focused. This section reports findings concerning effectiveness of explicit instruction, specifically processing instruction and traditional instruction compared with implicit instruction.

Effectiveness of explicit instruction

There were no preexisting differences between the three experimental groups: PI; TI and II and we can attribute any post-intervention differences to the effects of instruction. In the interpretation task, the PI group obtained the greatest gains from pre-test to post-test (18.3%) whereas TI and II groups only made slight improvement: about 3.6% increase for the TI group and 4.3% increase for the II group. The statistical analysis of One-way ANOVA further revealed that a) PI group improved significantly from pre-test to post-test with large effect ($d=1.18>0.8$ and $p=0.0<0.05$); b) TI group did not improve significantly from pre-test to post-test (small effect: $d=0.2<0.5$ and $p=0.3>0.05$); c) II group did not improve significantly from pre-test to post-test (small effect: $d=0.35<0.5$ and $p=0.2>0.05$). A repeated two-way ANOVA was conducted on the raw scores of

the interpretation task. Instruction (processing group, traditional group and implicit group) was the between-subjects factor, whereas Test (pre-test, post-test) was the within-subjects factor. The results revealed a significant effect for Test ($F(5.9)=120.7, p=0.0<0.05$) and a significant effect for Instruction ($F(9.0)=183.3, p=0.0<0.05$).

Group	Pre-test		Post-test		Improvement (From pre-test to post-test)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
PI (N=21)	13.2	2.5	18.7	6.1	29.4% ($p=0.01, d=1.18$)
TI (N=24)	12.7	3.9	13.8	5.7	8.0% ($p=0.18, d=0.2$)
II (N=21)	12.7	3.7	14.0	3.9	9.3% ($p=0.06, d=0.35$)

Table 11. Improvement in the interpretation task

In the production task, the PI and TI groups obtained greatest gains from pre-test to post-test: about 39.0% increase for the PI group and about 61.5% increase for the TI group. II group gained very slightly from pre-test to post-test (i.e. about 0.5% increase). The statistical analysis of One-way ANOVA further revealed that a) PI group improved significantly from pre-test to post-test with large effect $d=1.32>0.8$ and $p=0.0<0.05$; b) TI group improved significantly from pre-test to post-test with large effect $d=2.66>0.8$ and $p=0.0<0.05$. The production data showed that processing and traditional instruction tend to have equal benefit for learners in producing English simple past. A repeated two-way ANOVA was conducted on the raw scores of the production task. Instruction (processing group, traditional group and implicit group) was the between-subjects factor, whereas Test (pre-test, post-test) was the within-subjects factor. The results from the statistical analysis revealed a significant effect for Test ($F(36.7) = 710.8, p=0.0<0.05$); a significant effect for

instruction ($F(16.3)= 315.0, p=0.0<0.05$); and a significant interaction between Instruction and Test ($F 16.4)= 317.9, p=0.0<0.05$).

Group	Pre-test		Post-test		Improvement (From pre-test to post-test)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
PI (N=21)	1.0	3.0	8.8	7.8	88.6% ($p=0.00, d=1.32$)
TI (N=24)	0.8	2.7	13.0	5.9	93.8% ($p=0.00, d=2.66$)
II (N=21)	0.5	1.8	0.6	2.0	16.7% ($p=0.82, d=0.05$)

Table 12. Improvement in the production task

It was also found that the three groups did not perform significantly different in reading (medium effect $d=0.58>0.5$) and listening tasks (small effect ($d=0.29<0.5$), but better in sentence level (large effect $d=0.8$) than in discourse level tasks (small effect $d=0.17<0.2$).

Overall, the PI group improved significantly from pre-test to post-test and performed significantly better than other two groups. TI and II groups obtained slight but not significant improvement from pre-test to post-test; traditional and implicit groups appear to have limited effect on the interpretation of English simple past.

Task	Pre-test		Post-test		Improvement from pre-test to post-test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Listening task (tasks 1&2)	4.4	2.4	5.1	2.5	13.7% $p=0.03, d=0.29$
Reading task (task 3)	3.9	2.0	5.1	2.1	23.5% $p=0.00, d=0.58$

Table 13. Improvement in the listening and reading interpretation tasks

Task	Pre-test		Post-test		Improvement from pre-test to post-test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Sentence-level task (task 1)	3.5	1.6	5.2	2.6	32.7% <i>p</i> =0.0, <i>d</i> =0.79
Discourse-level task (tasks 2 & 3)	4.7	2.4	5.1	2.2	7.8% <i>p</i> =0.09, <i>d</i> =0.17

Table 14. Improvement in the sentence-level and discourse-level tasks

Discussions and Conclusion

Findings of Phases 1 and 2 of the study reveal the difficulties and challenges faced by Cantonese ESL learners when acquiring English simple past from the perspectives of local primary and secondary teachers, the teaching approaches adopted, and the role of explicit and implicit instruction.

Form-focused approach being dominantly used

Despite the promotion of the communicative language approach in the 1980s and task-based approach in the 1990s, teachers still seem to prefer the form-focused approach. When being asked to indicate the activities used most for the topic of English simple past, both primary and secondary teachers tend to use task-based and processing instruction significantly less frequently than other means, including form-focused, meaningful and also communicative activities. In another part when they were asked about their exact teaching approach adopted, 59.0% of the primary teachers claimed they used the traditional teaching approach, 40.0% task-based and 19.0% processing instruction. For secondary teachers, 53.0% claimed using the traditional approach, 45.0% task-based and 14.0% processing instruction. In the last part of the questionnaire when teachers were asked to suggest strategies for learning English simple past, findings are consistent in showing the

dominant role of form-focused means such as exercises and drillings of all kinds focusing on the past tense forms, games or other means highlighting the forms. Though some teachers claimed that they used processing instruction, they do not seem to know what processing instruction is actually about when being asked so in the open-ended section of the questionnaire. The use of teaching approaches/strategies is perhaps related to the teachers' perception of the difficulties or challenges encountered by the Cantonese ESL learners. When being asked the students' problems in LEARNING English simple past, more than half of both primary (59.7%) and secondary teachers (72.5%) believe that it is related to the production of both regular and irregular forms, which may be why teachers adopt a form-focused approach to help students master the forms.

Traditional instruction and processing instruction both effective in facilitating form production

While the traditional form-focused approach has been condemned in the literature, findings of Phase 2 of this study show that the traditional form-focused approach does not seem to be less effective when it comes to form production. Results of the study show that explicit instruction, specifically traditional instruction and processing instruction, has an equal effect in helping learners produce the English simple past form in the production task. In the interpretation task, however, processing instruction is most effective in helping learners map both the forms and meaning, in listening and reading, sentence-level and discourse-level interpretation tasks. Processing instruction as an effective means to help L2 learners map both forms and meaning should be introduced as early as in the primary level for primary students while traditional form-focused approach can also be employed as reinforcement.

Collaboration between SLA research and English language pedagogy required

Research findings should not be limited to researchers, and the gap between SLA and L2 pedagogy should be bridged through collaboration between frontline teachers and SLA researchers. To start with, teachers should understand the principles underlying L2 acquisition of English simple past: (a) the lexical preference principle; (b) the preference for nonredundancy principle; and (c) the sentence location principle. In acquiring English simple past, L2 learners tend to process lexical items as opposed to grammatical items when both encode the same semantic meaning (Bell, Trofimovich & Collins, 2015; Yeh, Joshi & Ji, 2015; Cintrón-Valentín & Ellis, 2016). This means, for example, when vocabulary and verb endings compete to be noticed and processed in an utterance, the vocabulary will more likely win out. Among the grammatical items, L2 learners prefer to process non-redundant meaningful grammatical form than redundant meaningful ones. If meaning is already encoded lexically, then learners will not need to process a form. L2 learners also tend to process the items in the sentence initial position before those in the final position and those in the medial position. Thus, teachers should understand that English simple past marker is a grammatical, redundant meaningful item and always located in the medial position, which poses great difficulty for Cantonese ESL learners.

Next, teachers should be aware that processing teaching materials are informed by the nature of input processing, including the principles outlined above. The intervention must be purposefully designed to circumvent inappropriate processing strategies. In developing the teaching materials, the following features of PI should be observed: (a) explicit information about a particular linguistic form/structure is introduced to the learners; (b) explicit information about a particular IP strategy adopted by L2 learners which negatively affects the acquisition of the form or structure is

presented; and (c) structured-input activities (covering both referential and affective activities) are used to help learners attend to both forms and meaning.

In the meantime, teachers should also be more aware of the role played by input in second language acquisition, and the underlying principles adopted by L2 learners that may hinder L2 acquisition. Only with increased awareness can teachers be able to apply PI to other grammatical items in helping their students realize the forms while attending to the meaning in SLA. The very recent study (Kim & Nam, 2017) examining L2 learning of idioms by Korean learners demonstrates the importance of such awareness and the effectiveness of processing instruction which can be applied to the lexical aspect as well.

Research findings should not be limited to researchers, and the gap between SLA and L2 pedagogy should be bridged through collaboration between frontline teachers and SLA researchers. It is important for more teachers to understand how to select appropriate teaching approaches and why (and how) English teaching should be grounded more firmly on linguistic principles.

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References

- Author. (2013). *Acquisition of be by Cantonese ESL Learners in Hong Kong and its Pedagogical Implications*. Bern: Peter Lang.
- Ambridge, B., Pine, J. M., & Lieven, E. V. (2014). Child language acquisition: Why universal grammar doesn't help. *Language*, 90(3), 53-90.
- Ayoun, D. (Ed.). (2015). *The Acquisition of the Present*. Amsterdam: John Benjamins Publishing Company.
- Bell, P., Trofimovich, P., & Collins, L. (2015). Kick the ball or kicked the ball? Perception of the past morpheme—ed by second language learners. *Canadian Modern Language Review*, 71(1), 26-51.
- Benati, A. (2001). A comparative study of the effects of processing instruction and output-based instruction on the acquisition of the Italian future tense. *Language Teaching Research* 5(2), 95-127.
- Benati, A. (2009). *Japanese Language Teaching: A Communicative Approach*. London: Continuum.
- Benati, A. (2010). Exploring the effects of processing instruction on discourse-level interpretation tasks with English past tense. In A. Benati & J. F. Lee (Eds.). *Processing Instruction and Discourse* (pp. 176-216). London: Continuum.
- Benati, A., Lee, J., & Hikima, N. (2010). Exploring the effects of processing instruction on discourse-level interpretation tasks with the Japanese passive construction. In A. Benati and J. Lee (Eds.), *Processing Instruction and Discourse* (pp. 148-177). NY: Continuum.
- Buck, M. (2000). Procesamiento del lenguaje y adquisicion de una segunda lengua: un estudio de la adquisicion de un punto gramatical en ingles por hispanohablantes [Language processing

- and acquisition of a second language: A study of the acquisition of a grammatical point in English by hispanohablantes]. (Doctoral dissertation, Universidad Nacional Autónoma de México, Mexico).
- Cadierno, T. (1995). Formal instruction from a processing perspective: An investigation into the Spanish past tense. *The Modern Language Journal*, 79, 179–93.
- Cintrón-Valentín, M. C., & Ellis, N. C. (2016). Salience in second language acquisition: physical form, learner attention, and instructional focus. *Frontiers in Psychology*, 7, 1-21.
- Cohen, J. (1994). The earth is round ($p < .05$). *American Psychologist*, 49(12), 997-1003.
- Doughty, C., & Williams, J. (1998). Issues and Terminology. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 1-12). Cambridge: Cambridge University Press.
- Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition*, 28(2), 339-368.
- Ferris, D. (2016). Promoting grammar and language development in the writing class. In E. Hinkel (Ed.), *Teaching English Grammar to Speakers of other Languages* (pp. 222-245). NY: Routledge.
- Gardaoui, N., & Farouk, B., (2015). The effects of two grammar teaching options on learning complex grammatical structures. *International Journal of English Language, Literature and Humanities*, 3(1), 711-730.
- Housen, A., & Simoens, H. (2016). Introduction: Cognitive perspectives on difficulty and complexity in L2 acquisition. *Studies in Second Language Acquisition*, 38(2), 163.
- Kirk, R.E. (2001). Promoting good statistical practices: Some suggestions. *Educational and Psychological Measurement*, 61(2), 213-218.

- Lee, J. F., & VanPatten, B. (Eds.). (1995). *Making Communicative Language Teaching Happen*. NY: McGraw-Hill.
- Lee, J. F., & VanPatten, B. (2003). *Making communicative language teaching happen*. Boston: McGraw-Hill.
- Long, M. H. (1991). Focus on form: a design feature in language teaching methodology. In K. D. Bot, R. Ginsberg, & C. Kramsch (Eds.), *Foreign language research in cross-cultural perspective* (pp. 39-52). Amsterdam: John Benjamins.
- Nazari, N. (2013). The effect of implicit and explicit grammar instruction on learners' achievements in receptive and productive modes. *Procedia - Social and Behavioral Sciences*, 70, 156-162.
- Nezakat-Alhossaini, M., Youhanaee, M., & Moinzadeh, A. (2014). Impact of explicit instruction on EFL learners' implicit and explicit knowledge: A case of English relative clauses. *Journal of Language and Linguistic Studies*, 10(2), 183-199.
- Norris, J. M., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50(3), 417-528.
- Nunan, D. (2004). *Task-based language teaching* (A comprehensively revised edition of *Designing tasks for the communicative classroom*). Cambridge: Cambridge University Press.
- Ortega, L. (2014). Second language learning explained? SLA across 10 contemporary theories. In B. VanPatten & J. Williams (Eds.). *Theories in second language acquisition: An introduction* (pp. 245-272). London: Routledge.
- Richards, J. C., & Renandya, W. A. (Eds.). (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge: Cambridge University Press.

- Robinson, P. (Ed.). (2002). Individual differences and instructed language learning (Vol. 2). Amsterdam: John Benjamins Publishing.
- Sagarra, N., & Ellis, N. C. (2013). From seeing adverbs to seeing verbal morphology: Language Experience and adult acquisition of L2 tense. *Studies in Second Language Acquisition*, 35(2), 261-290.
- Slabakova, R. (2015). Acquiring temporal meanings without tense morphology: The case of L2 Mandarin Chinese. *The Modern Language Journal*, 99(2), 283-307.
- Tamayo, A.G. (2010). *The role and effect of explicit grammar instruction in SLA*. (Master dissertation. The University of Navarra, Spain).
- Tavakoli, M., Dastjerdi, H.V., & Esteki, M. (2011). The effect of explicit strategy instruction on L2 oral production of Iranian intermediate EFL learners: Focusing on accuracy, fluency and complexity. *Journal of Language Teaching and Research*, 2(5), 989-997.
- Tong, X., Deacon, S. H., & Cain, K. (2014). Morphological and syntactic awareness in poor comprehenders: Another piece of the puzzle. *Journal of Learning Disabilities*, 47(1), 22-33.
- VanPatten, B. 2002. Processing instruction: An update. *Language Learning*, 52(4), 755-803.
- VanPatten, B., & Cadierno, T. (1993). Explicit instruction and input processing. *Studies in Second Language Acquisition*, 15(2), 225-243.
- Widdowson, H. G. (1978). *Teaching Language as Communication*. Oxford: Oxford University Press.
- Wu, K. Y. (2007). Teacher beliefs and grammar teaching practices: case studies of four ESL teachers. (Doctoral dissertation, The University of Hong Kong, Hong Kong).
- Yeh, Y. F., Joshi, R. M., & Ji, X. R. (2015). The development of morphological awareness in Chinese ESL students. *Contemporary Educational Psychology*, 43, 51-60.