

PROCESSING INSTRUCTION: AN INPUT-BASED METHOD TO TEACH GRAMMAR

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ABSTRACT: This paper aims to provide a review of Processing Instruction (PI), an input-based method which is believed to enhance students' acquisition of grammatical points. The theoretical background and main characteristics of this approach will be discussed in order to highlight the differences it holds with other grammar instructions in foreign language teaching. Types of activities as well as specific examples will then be included, which would be of great help to teachers who want to implement this approach.

Keywords: Processing Instruction (PI), grammar, acquisition

HƯỚNG DẪN XỬ LÝ: MỘT PHƯƠNG PHÁP DỰA VÀO DỮ LIỆU ĐẦU VÀO ĐỂ DẠY NGỮ PHÁP

TÓM TẮT: Bài báo này cung cấp thông tin sơ lược về Processing Instruction (PI), một phương pháp dựa vào thông tin đầu vào, có thể nâng cao việc tiếp thu các kiến thức ngữ pháp. Nền tảng lý thuyết và các đặc điểm chính của phương pháp sẽ được đề cập tới trong bài báo để làm nổi bật lên sự khác biệt với các phương pháp dạy ngữ pháp khác trong việc dạy ngoại ngữ. Ngoài ra, bài báo còn cung cấp các dạng hoạt động cùng ví dụ cụ thể, để giúp các giáo viên áp dụng phương pháp này tốt hơn.

Từ khóa: hướng dẫn xử lý (PI), ngữ pháp, tiếp thu

I. INTRODUCTION

Grammar teaching has always been playing a vital role in Foreign Language Acquisition. Since 1999, Thornburry

suggested that learners' language development tends to be fossilized faster without appropriate grammar instruction. Cowan (2009) also argued

that grammar instruction can affect adults' language in the long run. As a result, choosing approaches to teach grammar is one of heated debates. Effective methods and techniques can be considered as an essential element contributing to an efficient EFL class (Nguyen, 2000).

Out of a plethora of methods to teach grammar, Vietnamese learners were familiarized with deductive lessons, in which they were exposed to formal grammatical rules before getting an opportunity to practice (Silvia, 2004). However, it is believed that handling such a great amount of grammatical explanations in a lesson may negatively affect students' communication in the target language (Nunan, 1998). It is also common for Vietnamese learners to do writing exercises at sentence level or drill practice with the hope to memorize the target patterns. In recent years, the inductive approach has become more commonly used. Students can form generalizations about grammatical rules after some examples in spoken or written forms. Though it gives students a chance to activate their own knowledge and elicit the rules by themselves, it is easy for them to be confused as the rules are not presented explicitly (Silvia, 2004). Both of these approaches draw students' attention to

form instead of meaning, hence, they often get the message from the structural components.

There is a method that has not been widely used among the English learning community in Viet Nam, which is Input Processing Instruction (PI). When compared to other methods which focus on form only, this input-based method puts a great deal of emphasis on their processing strategies to make form-meaning connections (Russell, 2011). The ability to process, especially with English learners, is of great importance to their foreign language acquisition because it can allow them to consciously acquire structures that they have not learnt before (Neupane, 2009).

Like other Vietnamese instructors who pay special attention to seeking good approaches and methods to enhance EFL teaching (Pham, 2000), I find myself having the responsibility to make a contribution. Therefore, I would like to introduce Processing Instruction as a new method of teaching grammar to other co-workers as well as teachers at all levels.

My article consists of 2 main parts. First, the literature review will provide basic knowledge related to the theoretical background of Processing Instruction, its characteristics and various types of activities which can be applied in classrooms. Second, some

previous studies investigating on this grammar instruction will be discussed to compare PI with other approaches.

II. LITERATURE REVIEW

This part will discuss the theoretical background of Processing Instruction, its characteristics and different types of structured-input activities based on PI.

1. Input Process Theory/ Principles of Input Processing

Theoretically, this approach was found by three main principles in the Input Processing Theory, which were considered as mental strategies that students employ when processing input (VanPatten 2002, 2015a, 2015b). These strategies are default yet flawed, therefore, can delay the acquisition process (VanPatten, 2015). Each principle will be presented below along with examples.

P1: Learners process input for meaning before form.

For example, when being exposed to the following sentence, learners tend to process lexical items rather than grammatical forms. Hence, they may not process the tense marker 'ed' because they derive tense from the adverbs of time 'yesterday'. Processing content words can obviate the demand to process the target grammatical structures.

"She watched this movie yesterday"

P2: Learners assign the first noun/ noun phrase as the subject of a sentence.

That explains why they may misinterpret the passive sentence "She was killed by a man" as "She killed a man" because both nouns in this sentence can perform the action.

P3: Learners will prioritize processing the information in the initial position first

Therefore, if the target structure is located in the beginning of the sentence, learners tend to get more exposure and better retention of it.

2. Basic characteristics of processing instruction

- Using the Input theory as the backbone, PI put a great deal of emphasis on the input, in order to help learners build a form-meaning connection and drive them away from inappropriate mental processing strategies. Also, giving output is not recommended in this phase as neither fluency or accuracy are the main focus

- According to VanPatten (2002, 2015a, 2015b), this approach comprises three main components which form a step-by-step procedure for teachers to follow, which is shown in Figure 1.

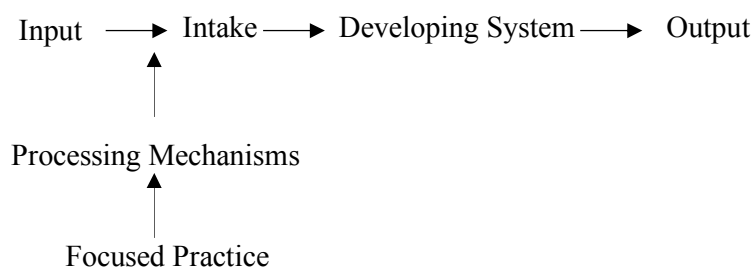


Figure 1: Processing - oriented grammar instruction (Lee & VanPatten, 2003)

- *Explicit information:*

This step is believed to trigger learners' noticing functions or metalinguistic processing, which is conducive to second language development. Learners will be provided with information about the target structure (Benati & Angelovska, 2015). Teachers can use learners' first language for this stage to make sure there is no confusion among students. However, even without the support of explicit information, learners can still process input in the following activities, so this step is entirely optional (VanPatten, 2013).

- *Processing mechanisms:*

The processing mechanisms, as shown in Figure 1, have direct influences on how input is processed. Therefore, it is necessary for teachers to remind students of default mental strategies which may be employed yet will hinder the input processing. Afterwards, advice related to accurate processing strategies should be given, which minimizes the

possibility of misinterpreting the target form (Rasuki, 2017).

- *Structured-input activities*

After being explained about the target linguistic form and appropriate mental strategies, students are engaged in two types of activities, including referential and affective. These activities are created with the aim to help learners process input more accurately and effectively.

2.1. Referential activities:

Students will first be exposed to referential activities which include a set of sentences with a target linguistic structure as well as distractors in the form of listening or reading exercises (VanPatten, 2002). They are expected to complete the tasks before knowing whether their answers are right or wrong; however, no explanation towards their choices will be provided. By that way, learners have to generate a link between the components of target form and their meaning and function,

which enables them to perform the task successfully.

By mixing the correct answers with other similar forms, teachers can push learners to pay more attention to the input as well as avoid generalizations being made about mental strategies. In other words, they cannot apply the same processing strategies on every sentence as there are embedded distractors which may lead them to give wrong answers (VanPatten, 2002). Examples of distractors can be seen in sentences number 2, 4 and 6 in the following exercise that aims to teach causative constructions in English:

Listen to each sentence and answer each question given.

1. The teacher had John clean the board.
2. John brought the girl some flowers.
3. The men made Richard buy some bread.
4. Jean asked Jack for a lift.
5. The girl made the boy pay the bill.
6. He bought me a book about happiness.

(VanPatten, 2002; Wong, 2004)

After listening, students will be required to answer questions like "Who brought the girls flowers?" (number 2) or "Who paid the bill?"

(number 5). The questions in similar forms together with the distractors encourage more effort from learners when processing.

2.2. Affective activities:

These activities are carried out after the referential ones, in which students will be required to give affective responses related to their beliefs or opinions, via a set of sentences. As this stage mainly aims at strengthening the correct mental strategy that has been used, the answers can simply be "agree", "disagree", "yes", "no", "true" or "false". However, in order to answer correctly, students have to use the target grammatical forms to get the meaning. Also, it is worth noticing that teachers must not require learners to make any kind of language production (Benati & Angelovska, 2015).

An example of affective exercises, which is related to the referential activity mentioned above, will be discussed below. Two kinds of exercises are in line in terms of the target structure; however, there is no distractor included in the latter.

Say 'Yes' if you think the actions asked by the teachers are common. Say 'No' if you think what the teachers ask is not common.

1. Teachers have their students kill animals.
2. Teachers get their students do homework.
3. Teachers make their students study hard.
4. Teachers get their students clean the school yard.
5. Teachers make their students listen to their explanation.
6. Teachers have their students play a videogame in

(VanPatten, 2002; Wong, 2004)

3. Types of structured-input activities

According to VanPatten in *Making Communicative Language Happen* (2013), there are six variations of structured-input activities, which is demonstrated in the following figure. Teachers who would like to implement this approach can refer to this part as a glossary of activities.

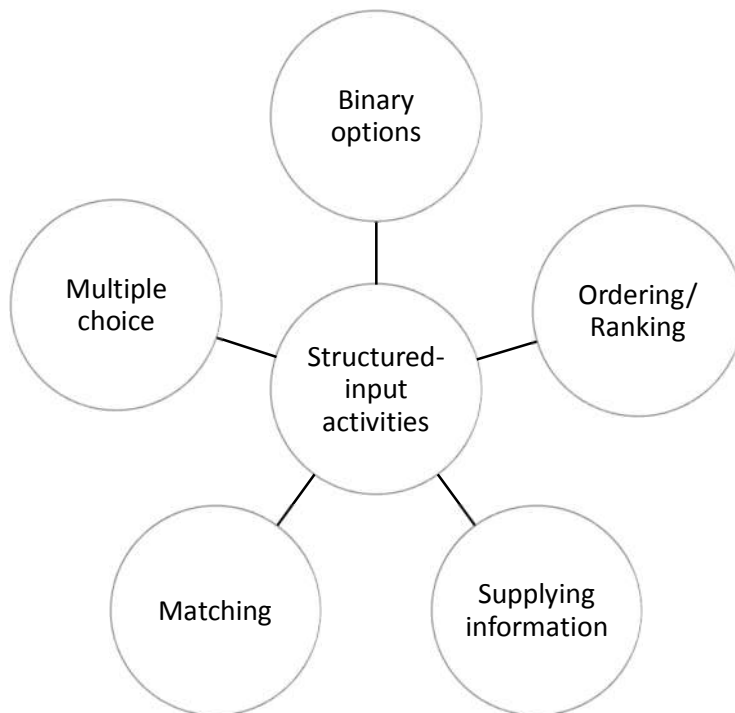


Figure 2: Types of structured-input activities (Lee & VanPatten, 2003)

3.1. Binary options:

As the name suggests, this exercise requires learners to read the statement and make a choice between

two possible options. The choices can be true or false, yes or no, agree or disagree, likely or unlikely and so on. As this kind of exercise works better

as an affective activity, it is worth noting that learners choose their answers based on their own experience and point of view.

Based on your experience, determine whether the following statements are likely or unlikely.

- | LIKELY | UNLIKELY | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. A student who works part-time takes more morning classes. |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. An engineering student studies more than an art student.
(and so forth) |

Figure 3: *The Typical Student* (Lee & VanPatten, 2003)

3.2. Matching:

In this exercise, learners have to make logical connections between input information. For example, students have to match a picture or a name to a sentence or match an event to its cause or consequence.

For each sentence in Column A, indicate to which activity in Column B it is most logically connected.

COLUMN A	COLUMN B
Alice . . .	She . . .
1. works part-time.	a. goes to the gym.
2. exercises five times a week.	b. studies every night.
3. gets good grades.	c. earns \$5.00 an hour.

Figure 4: *Associations* (Lee & VanPatten, 2003)

3.3. Multiple Choice:

Learners will be required to select from three or more options, one of which contains the target grammatical forms that are taught in the lesson. This is a popular type of exercise in English learning so it is easy for students to practice in class.

Select the phrase that best completes each statement about your instructor. Afterward, your instructor will tell you if you are correct or not.

1. As soon as he gets home, my instructor . . .
 - a. reads the mail.
 - b. has a cocktail.
 - c. plays with his children/dog/cat.
 - d. does something else.
2. When it's time for dinner, he . . .
 - a. prepares the meal.
 - b. helps with the meal.
 - c. waits for the meal.
 - d. orders a pizza.

[The activity continues in similar fashion.]

Figure 5: How well do you know your instructor? (Lee & VanPatten, 2003)

3.4. Surveys:

This engaging activity can allow students to interact with other classmates as well as improve their confidence in communication. The survey can ask learners to answer questions for themselves or elicit

answers from other respondents. A variety of response formats can be used for surveys. Students can be asked to indicate agreement, frequency or provide information about the number of people who have the same answer.

	5	4	3	2	1
5: Strongly agree					
4: Agree					
3: Somewhat in agreement					
2: Disagree					
1: Strongly disagree					
The government . . .	5	4	3	2	1
1. understands us.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. helps us.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. controls us.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. ignores us.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. taxes us too much.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. doesn't represent us.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. guides us.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 6: Survey activity (Lee & VanPatten, 2003)

3.5. Ordering and Ranking:

In this exercise, learners will order the structured input in different kinds of order. It may be in terms of importance

or likelihood or chronology. Students might have to answer some questions related to the topic of the input before completing the ordering task.

Step 1. Following is a list of things your instructor might have done last night. Check off those that you think he or she did.

Our instructor . . .

- had a cocktail.
- read the newspaper.
- walked the dog.

Figure 7: What did your instructor do last night? (Lee & VanPatten, 2003)

III. PREVIOUS RESEARCH

This part of the article aims to provide readers with some studies which have been carried out to investigate the effectiveness of Processing Instruction, from which highlights the strengths of PI regarding grammar acquisition compared to other grammar instructions and in terms of mental factors. These studies which will be mentioned below play an important role in enlightening other researchers and educators about this new teaching method.

First, PI has been proved to outweigh traditional grammar instruction (TI) when it comes to learners' comprehension of the target structure and their ability to use grammar points accurately. This can be seen in the experimental research of Sihem Oumelaz (2003), in which the statistical data and findings suggested that input processing instruction was more effective than traditional out-put based method.

Specifically, Students' explicit knowledge and grammatical accuracy when using English past tenses were significantly improved. Surprisingly, this is in line with other studies by Baleghizadeh and Saharkhiz (2013) and Lee and Benati (2007), which also investigated the efficiency of structured-input activities targeting past tenses in English.

The superior advantages of using PI can also be seen in other languages. Cheng (1995), Allen (2000) and Benati (2001) compared the effects of PI versus TI acquisition of the Spanish copular verbs, French causative and Italian future tenses, respectively. They all suggested that while PI learners improved on the interpretation task, both PI and TI groups showed almost equal improvement on the production tasks.

The benefits of using PI can be noticed not only in the acquisition of grammatical forms, but also in learners'

motivation. Modirkhamene, Pouyan and Alavinia (2018) mentioned in their study that processing instruction contributes to boosting beginners' motivation in learning, hence, they were more actively engaged in structured-input activities.

IV. CONCLUSION

Grammar is considered the backbone of every language, including English. Without it, the written text or utterance will be broken and incomprehensible, hindering the process of communication (Terrell, 1991). That explains why EFL teachers have been devoting tremendous effort to find effective approaches and diversify their teaching methods with the aim of enhancing learners' comprehension of grammar points (Nguyen, 2000). By working with comprehensible input, students can gradually get acquainted with the target form, discover an appropriate processing strategy and finally, acquire the knowledge. Unlike other methods that focus too much on form and production, this input-based approach facilitates form-meaning connection and transforms grammatical explanation into communicative use (Russell, 2011). Even though PI has been used in other countries to teach foreign languages, like English, French or Italian, through which its benefits are proved, it remains unpopular in the context of Viet Nam. As a result, it is recommended that Vietnamese teachers as well as researchers take a step to

implement and investigate the effectiveness of PI. This can broaden the scope of using PI and help other instructors make informed decisions toward the application of PI in classroom settings.

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