

## IIO MODEL IN LEARNING SECOND/ADDITIONAL LANGUAGE

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### Abstract

*This paper summarizes a range of theoretical reviews about language and learning language and how important the role of language input to the success of the learners. Learning language used to be focused on the syntax or sentence structure, which is no longer the answer of learning an additional language (AL) or Second Language (SL). The complexity of language and the learners automatically make the language learning become a complex subject and complex study. There some aspects inside the learners which influence the language learning process. The notion of interlanguage of the learners is also an important process to be analysed by the teachers. Input Interaction and Output (IIO) model is one which can present information about the complexity of the language process. Therefore, this essay will describe how the theories about input, interaction, and output can work well in the practice of SL or AL learning class. This essay will also discuss how the linguistic and conversational adjustments of the teacher, as well as the modification of the interactional structures help better out put in the language learning.*

**Keywords:** *Input, Interaction, Interlanguage, Output*

### A. INTRODUCTION

Learning language which was focused on the grammatical structures or lexical choices cannot show the complexity of the language itself as well as they cannot give description about the language use. In fact, people use language to communicate and interact with others. Since language is dynamic, complex, and non linear, it involves many disciplines (Larsen-Freeman, 1998). Ellis (1998) adds that language is the process of emergentism and conectivism between many features and disciplines included linguistic and non linguistic features. All aspects such as phonology, morphology, semantics, language use, meaning, society, and culture are mixed together. Therefore, learning language cannot be simplified as only learning the linguistic form. Moreover, Fauconnier (2003) says that the study of language is the study of language use and that when we engage in any language activities, we draw unconsciously on vast cognitive and cultural resources, call up models and frames, set up multiple connections, coordinate large arrays of information, and engage in creative mapping, transfer, and elaboration. Language learners have to be able to connect the language forms such as lexis and syntax to the use in society.

Moreover, language learners themselves are also complex. There are some aspects inside the learners which influence the language learning process. Dornyei (2000) finds that motivation is one aspect that influences the learners in acquiring the second language. Furthermore, Penfield and Robert in Marinova-Todd et al (2000) introduce the notion of critical age period in acquiring second language.

The complexity of language and the learners automatically makes the language learning become a complex subject and complex study. In his hypothesis, Corder (1967) finds that all knowledge which is transferred to the learners are not fully absorbed. There are only some of the transferred knowledge will be the intake because each learner has different

ability in understanding the input she/he got. In addition, Allright & Bailey in Boulima (1999) assert that input refers to the language which the learners hear or read. All knowledge gathered from listening to their teacher and all materials read during the learning period are the input. Moreover, Krashen in Boulima (1999) defines intake as comprehensible input. It means that only the understandable input of the target language which becomes the intake of the learners. It is clear that learning language is not as simple as what an individual get is what she/he achieve. Learning language is a process. The process which can consciously and unconsciously happen.

Acquisition does not happen only in the learner's mind but in the interaction of the mind and the social context. The learners have to be able to use the intake in making interaction in social context. The interaction with the social context itself brings the learners to work with pragmatics. Kasper & Roever (2005) explains that Pragmatics in a second language not only discuss about how to do things with target language words but also how to communicative actions and the words that implement them are both responsive to and shape situations, activities, and social relationships. The main goal of learning language itself is to be able to interact with the society using the language. So, the input can determine whether the learner can use the language in native-like or not (Bardovi-Harlig in Kasper & Roever (2005).

Referring to all of those theories about language and learning language and how important the role of language input to the success of language learning, I would like to see how learning language takes place in the practice. This essay will describe how much the practice of language learning class implies the theories about input, interaction, and output. This essay will also discuss about linguistic and conversational adjustments in the practice, as well as the modification of the interactional structures from the teacher to the students.

## **B. DISCUSSION**

### **Input**

Input is the first stage in Input-interaction-Output Model (IIO Model) introduced by Gass in 1988 and 1997 (in Block, 2003). In this stage, learners will receive the incoming data. In other words, input is the language which the learners hear or read during the learning activities. It called apperceived input. In this stage, the features of input will whether or not notice by students is depended on the factors of frequency or infrequency, the affect which is influenced by social and psychological distance including degree of comfort, anxiety and fatigue, aptitude, attitude, and motivation. It also involves attention and factor of prior knowledge. The inputs perceived by students are from teacher and other resources, including the students themselves.

In the learning activities in the classroom, the students receive the input from the teacher through the lecture (topic presented). Hall and Hewings (2001) assert that good input can be given when teacher emphasizes the role of teacher as facilitator rather than presenter, and learners are actively involved in their learning processes. In this way, the learning activities involve participation from learners to learners as well. The teacher gives explanation and instruction about what the students are going to do on that day; the teacher also provides the instruction of the activities on the white board; and the students share idea to another friend. Brainstorming ideas and asking the students to practice talking with their partner and discussing about their words are two example of facilitating the input to the learners. By doing brainstorm of words, the leaners can increase lexical knowledge in producing and understanding the sentences. However, intake for every learner is different even though every student receives the same input. During this stage, the learners are parsing the incoming data from the teacher based on previous experience and then parsing them to further analysis (Block, 2003).

The input has different effect to the students because it is influenced by prior knowledge, frequency and the attention of each student. The input noticed or not by the learners is influenced by frequency including multiple instances and salient occurrence. It is often found in the class that some of the students are less serious in practicing talking and speak in their first language rather than English as target language during the discussion, or some of them are busy of operating their gadget. These activities of course highly contribute to the failure of taking the input.

In addition, Krashen in Boulima (1999) asserts that to become intake, the input should be comprehensible. Moreover, Boulima (1999) outlines three points related to producing comprehensible input in language learning: input becomes more comprehensible through the speech modifications. Making modification to the interactional structure is the adjustment or simplification of instructions and vocabularies used during the interaction with the students in the class, such as exemplified by self, other repetitions, clarification requests, comprehension and confirmation checks, and expansions (Long in Boulima, 1999). Speaking clearly, slowly, lot of pauses, almost no contraction form in giving the explanation and instruction are the ways of helping the students to get well comprehension on the instructions. Those things contribute to comprehension process of the learners because they need to segment incoming speech into constituent parts- sounds, words, clauses, utterances, and sequences of utterances related to a particular topic, and need time to process the incoming information and to identify form-function-meaning relationship (Wesche, 1994). Moreover, repeating some questions is also the modification form from the teacher which enables the student to gather the meaning conveyed. Ellis in Wesche (1994) adds that self-repetition is important in communicating and transferring content to lower proficiency non-native learners.

### **Interaction**

Interaction is the second stage in IIO Model which is very important between the students and the teacher and among the students themselves because through the interaction, the students get the input as well. This stage can be simply considered as the continuation of the input process in learning language. The interaction between teacher and students can help the student to express the meaning of the lesson which then will contribute significantly to the success of the learners.

Giving more questions to the students about the topic is one of teacher's strategies on teaching. The questions are addressed more often by the teacher as topic-initiating moves, marking new topics and requiring a response from the learners. High proportion of questions may also reflect clarification requests, comprehension and confirmation check from the students' response. Repeating questions becomes important to maintain and awake the students to keep interacting in learning. In conversation, the interaction by clarification or other restatement is important for the students' comprehensive check.

In the interaction stage, foreign discourse and interlanguage talk are significant factors in noticing the input of the learners. Foreign discourse is implemented by the teacher in facilitating comprehension of meaning for the students and developing their lexical ability. Conversational modifications are done to facilitate the comprehension and meaning clarity of the students. In this interaction mode, the teacher tends to be slower to deliver clearer articulation and to avoid the contractions forms and idioms. This modification makes the words uttered clearly so that it will be easier to be understood by the students. More frequently pausing can also make articulation become clearer as well as it gives more changes to the students in planning time to their responds. Teacher's modifications to learners depend on individual factors such as speech style, as well as upon the discourse, social and cultural contexts and interactions among students. Wesche (1981) considers that the factor of foreign discourse happens because learners cannot comprehend normal teacher's speech. Therefore,

Speech modification facilitates the comprehension of the students in learning language. Modification strategy that is used in teaching session aims to avoid the conversation problem with students and to repair the problem if it happens. Successful comprehension helps learners stay in interaction longer, thus it keeps the students' participation in practicing the target language. Foreign discourse modifications can also help lexical development of the target language.

### **Output**

The output is the third stage in IIO model. It is a part of feedback of what learners have produced in language. "Output can serve as part of a feedback loop to the intake stage" (Block, D., 2003, p. 30). Block (2003) adds that each student in the class has different understanding and ability. These two aspects influence the participation of the students. As the result, the output of the student is diverse. Some of the students are active whilst some others are not. Some students often do more thing than what they are asked to do. For example, the students write sentences when the teacher asks them to write only words in the brainstorming session. Some of the learners are less active in the part of speaking but others practice their conversation actively. In other words, the output is influenced by the participation of the students individually and whether or not they are active or passive participation in the entire part of learning sessions. Boulima (1999, p. 48) states that the acquisition of language skill results from productive practice of the learners.

In addition, in accordance to the participation of the students during the lesson, it can be identified that some students are actively respond to the teacher's questions but some others tend to silent and do other activities such as writing, using the mobile phone, or just facing to the teacher without saying anything. Gass & Selinker (1994) assert that feedback is derived from input. It can be positive or even negative. Moreover, output is not an endpoint in the learning process; rather it is a potential catalyst for starting up the entire process again (Gass in Block, 2003).

When input is sent to the entire process, there is an apperception stage, where concepts such as attention, noticing and information parsing are introduced to account for how the mind copes with the massive amount of linguistic input to which it is exposed when an individual is engaging in a conversational interaction. In other word, learners' mind is the filter of the massive linguistic input and the filtered input is then used in the interaction. It is normal to see the students do not greatly participate in the discussion since the output is usually not as much as the input.

### **Feedback**

Feedback is generally used to comments on the students' works in producing the language. Feedback comes from the input which is can be positive or negative evidence when the learner produces the utterance (Gass & Salinker, 1994). Positive evidence is when the learner provides the question or conversation in a well-formed English. Negative evidence is feedback from the learners that is not comprehensible or incorrect which is also called as "error correction." Feedback can be categorized in many ways including the explicit correction, recast, clarification, metalinguistic feedback and repetition. Explicit correction is the correction that indicates to incorrect utterance of learner. The recast is the reformulation a part of all the learner's utterance. Clarification indicates the ill-formed or misunderstood of the utterances. Metalinguistic feedback is the specification of ill-formed of utterance. Elicitation feedback is the correction by eliciting the completion of the utterance, using a direct question and asking the learner to reformulate.

### **IIO Model in second language process**

Learning a language is a process that involved not only cognitive process but also sociolinguistic and psycholinguistic process within the individual's brain and behavior. In addition, the socio-cultural and environmental factors cannot be ignored because all factors are mutually influenced in order to achieve success in language learning. Input-Interaction-Output (IIO) model is language learning model developed by Susan Gass in 1988 which try to relate social factors to language learning process. Gass in Block (2003) asserts that IIO model is the integration of some concepts that influence individual in second language process; comprehensible input and filter that introduced by Stephen Krashen. Gass also elaborates IIO model based on these concepts and includes interaction part in her model. The acquisition process in IIO model is more likely the process that occurs in the individual brain. Actually, the learning process is not only cognitively occurred in the brain but it also needs environment to activate the cognitive itself through social interactions. Moreover, Gass divides IIO model into five primary stages such as *apperception*, *comprehended input*, *intake*, *integration*, and *output stages*.

In the *Apperception stage*, IIO model shows that input or incoming data in learning second language is an essential element, and without input acquisition cannot occur. The second language learner will notice the input and relate it to his or her past experience, then process the inputs into meaningful units for further learning process. In order to make the input meaningful, social interactions with the peers, teachers, parents and school members will encourage the learners to acquire the language successfully. Dornyei (2000) asserts that micro context of L2 learning, the role classroom milieu and school environment are significant in learning process. In addition, Gass in Block (2003) believes that there is a filter that determines the process of language input in the brain. She also includes linguistics factors such as frequency, salient and affective factors in the filter process. For example, if a second language learner does not often hear particular structure in a language (frequency), or she/ he does not hear the pronunciation clearly (salient) in the language learning process, these reasons may hinder the processing of the input itself. Furthermore, Gass in Block (2003) also mentions that negative attitude to L2 culture as well as affective factors may inhibit input in the second language-learning process. In other words, the input that is gathered through the filter process is called *apperceived input*. In this case, a new knowledge has relation to prior knowledge that allow the learner to comprehend the input.

The second stage of IIO model is *comprehended input* which is the result of *apperception*. The comprehension of incoming data or received input occurs at two levels; immediate level and long-term level. In immediate level, the input is processed to be understood at the very moment input occurs in order to comprehend and participate in a conversation. Therefore, the learners need to collaborate and find a new knowledge together with peers in order to be able to comprehend the input. While at long-term level, the second language learner will store all the received input and information for future use. In other words, the learner is able to recall the input stored in his/her memory in order to produce target language sentences in the future.

*Intake* is the third stage of IIO model that refers to the learners' interlanguage development. It is an assimilation process where learner's new comprehended input is inserted into the learner's linguistic knowledge which includes familiarity of L1, L2 and Universal Grammar. In addition, Gass in Block (2003) states that *intake* cannot occur if the learner does not have enough prior knowledge to make the new input becomes logic for them. Moreover, *intake* is the stage of hypotheses formation where the second language learner receives information about target language which allows him or her to assume how the target language works in the conversation. In this process, the second language learner will test this hypothesis and then modify the hypothesis with his or her own hypothesis until he/ she

confirms the rule of the language. For example, a second language learner receives input about verb formation in the past tenses which is ended with –ed. The learner hypothesizes that English verbs in past tenses are formed by adding –ed at the end of the verbs and the learner will apply the rule. As more the learner receives the input about verb formation in the past tenses, the learner will find that his or her hypothesis is not always true, and then he or she will modify the hypothesis accordingly. Actually, most of the input and hypothesis testing occur through the interaction with L1 speakers which lead the second language learner to the integration stage.

Gass in Block (2003) puts integration in the fourth stage of IIO model. In this stage, integration shows the process of evolution of learners' interlanguage in using grammar of L2. Integration may result the change of the hypothetical rule that has been confirmed through the frequency of input in learning second language. The hypothesis is not always true, e.g. all verbs are added –ed in the past tenses. Then the learner will strengthen and confirm a current rule of L2 grammar since they find the new evidence. Although, the rule has been stored in the learner's memory, it does not mean that the rule is ready to use until further evidence is available to support the learner's confidence to use it in the reality. In other words, the second language learner can practice their input with target language community in order to prove their hypothesis

Finally, the last stage of IIO model is output. In this stage, Gass in Block (2003) states that output is not an endpoint of the second language process but it has cycle that brings back the learner to the process of assimilating that the learner test hypothesis and receive more input and intake during the language acquisition process. In other words, output is a catalyst factor that can start up the entire process of learning again Gass in Block (2003). Gass also underlines that the learner's personality, attitude and interest will affect the output and input as well. A shy or uninterested learner may refuse to accept the entire language learning process.

To sum up, Input-Interaction-Output (IIO) model that introduced by Gass in Block (2003) explains how second language acquisition process based upon cognitive process in the individual brain. These processes are actually reflected how a second language learner learns the language through five stages in IIO model. This model is very powerful to accommodate other studies in SLA, but Gass in her model does not mention about how social factors influenced individuals in learning second language. Further investigation is still needed for this issue.

### **C. CONCLUSION**

In learning process, the input of target language directed to learners is modified in various ways. The input that is perceived by the learner is influenced by environmental factor and belief such as motivation, attitude, attention and interaction. Those factors are strongly engaged of the learners' success in learning second or foreign language.

Comprehended input is the result from noticing the input. The data will be assimilated by students as a new language features. The assimilation may succeed if the students have perceived and comprehended the input sufficiently in all part teaching session.

There are other problems that related to successful in learning acquisition that is associated with belief to learning language. Further exuberant studies about how significant environmental role to students in classroom context are expected to be conducted. The further studies need to be done to investigate and find out more evidence about how significant learners' belief in learning language contributes to the successful factors to SLA. Changing mindset of teachers is very important. They should not merely focus on grammatical structures as the most significant features in learning language but only to support the semantic and lexical term in communication purpose. The classroom experiments

suggest that certain kinds of learner-learners interactions can be very useful in providing more varied communication in language practice.

In learning process, teacher can modify the input of target language which is beneficial to increase the understanding of the learner, especially for them who are new learner and still in low proficiency level of the target language. More understanding leads the learners to get close to the success in learning the language.

The modification is not only in the linguistic aspects such as phonology (slower rate of delivery, more careful articulation, avoidance of contractions), morphology and syntax (shorter utterances, less complex sentences, more questions), semantics (almost no idiomatic expression, high lexical frequency of nouns and verbs), but also the conversational aspects such as content (more here and now orientation), and interactional structures (more use of questions for initiating topic, more repetition, more comprehension checks, more clarification requests). Moreover, the roles of teacher in the classroom should simply describe the implementation of cognitive, corpus linguistic, sociolinguistic, and pragmatic theory about language learning.

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