

The Effect of Teacher Talk Modifications on Second Language Learners' Comprehension and Acquisition

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Abstract-In this review article, we have explored the effect of pre-modified input, interactionally modified input, and modification of information structure on the comprehension and acquisition of second language (L2) learners. While the effect of modifications on comprehension is evident, the same cannot be said of acquisition. Some studies support the effect of modifications on acquisition, yet others shed doubts on the value of modifications in terms of promoting internalization of language knowledge.

Keywords-Second Language Acquisition, Pre-modified input, Interactionally modified input, Modification of information structure.

1. INTRODUCTION

"Teacher talk" is defined as speech used by teachers that is characteristically modified in four areas: phonology, lexis (consisting of morphology and vocabulary), syntax, and discourse (Osborne, 1999). There are three main reasons for the growing interest in teacher talk and they relate to different roles of teacher: as provider of input, as facilitator of communication, and as instructor. First, there is a link between learners' comprehension and their progress in the foreign language. Second, studies have indicated that the way teachers talk (e.g. ask questions) influences the way learners use the language. Third, it has been realized that directing the learners' attention toward teaching focus is not easy (Lynch, 1996).

In 1985, Krashen proposed his Input Hypothesis. He described the development of learners' inter-languages in terms of comprehensible input. This kind of input contains linguistic features which are a little beyond learners' current competence level. In his famous "i+1" formula, i stands for the current status of learners' linguistic knowledge and 1 points to the level beyond this status. This hypothesis postulated two ways to make the input containing new linguistic structures comprehensible to the learners. They included the use of context and extralinguistic information. In Krashen's view, these devices help the learners to understand the input they are exposed to. For the sake of acquisition, input must be rendered comprehensible to the learners (cited in Brown, 2000). However, there has been the question of how input actually becomes comprehensible and what makes the input more comprehensible.

A review of the literature on input suggests that input may be made comprehensible i*n three ways. One way is to modify the input before it is delivered to the learners (pre-modified input). The other one is to engage the learners in the negotiation of meaning through interaction (interactionally modified input). The third one is to modify the type and amount of information (information choice) (Lynch, 1996). Following Krashen's lead, many researchers began to explore learners' comprehension and acquisition when they faced these types of modified input.

2. REVIEW OF LITERATURE

2.1. Pre-modified input

In order to explore the influence of pre-modified input on the acquisition of a second language, we focus on a number of studies which carried out research on pre-modified input, among other issues. The forms of language (input) native speaker teachers used in addressing nonnative learners was the focus of early studies of teacher talk and was influenced by the concept of "Foreigner Talk", a term coined by Fergusen (Lynch, 1996). He noticed that when people talked to foreigners, they used a special variety of simplified speech. He identified modifications to grammar, vocabulary, and pronunciation as main features of foreigner talk.

Chaudron (1983) presented five versions of a minilecture each containing a different type of repetition to 135 low intermediate and advanced level students in an effort to explore their effects on comprehension. Learners' performance on two types of comprehension questions (recall and recognition) was used as a measure of comprehension. Of five repetition types, repetition of the

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noun had the strongest effect on comprehension. However, for the more advanced listeners its effect was no greater than the other four types. It may be concluded that for lower level students redundancy (additional information) is of help, while for advanced learners it is of no effect.

Using a measure of listening comprehension (true/false questions), Grifith (1990) carried out an experiment on the effect of rate of speaking which involved playing recordings of short stories to 24 Omani teachers of English whose average listening proficiency was lower intermediate. The stories had been recorded at different rates of speaking: moderately fast, average, and slow. Grifith found that, at this level of proficiency in English, the learners understood information spoken at the average rate significantly better than when it was presented at the higher rate. However, their comprehension was no better at slow rate than average rate. There seemed to be an optimum rate of speaking above which learners at this level would begin to miss or mishear some information and really slow speech brought no gain in comprehension.

Chiang and Dunkel (1992) investigated the relative effects of three factors on comprehension: input modifications, subject knowledge, and listening proficiency level. 360 undergraduates at intermediate level listened to unmodified or modified versions of two short lectures and answered a variety of comprehension questions. The familiar and unfamiliar lectures were modified for the study to include elaborated information in the form of paraphrase and repetition of information. Chiang and Dunkel were able to show that modification helped the higher level students but not the weaker ones. So this provided support that discourse modifications help comprehension to different degrees according to the learners' overall level in the language.

Cervantes and Gainer (1992) carried out two experiments to compare the comprehensibility resulting from syntactic simplification and from repetition. One experiment involved 76 students majoring in English at varying levels of proficiency who heard two versions of a lecture which differed in the number of subordinate clauses they contained. Results of a cloze test showed that those who had heard the syntactically simpler version scored higher. In the second experiment a separate group of 82 students majoring in English like those in the first study heard one of three versions of another lecture: version 1 had few subordinate clauses, version 2 had more, version 3 was the same as the second but with repetition. The students scores indicated that version 1 (syntactically modified) and version 3 (repeated) were both easier than version 2 (no simplification or repetition). There was no measurable difference between the students comprehension of versions 1 and 3.

Ellis (1995) examined the relationship between properties of pre-modified input and vocabulary learning. He wanted to examine the effect of pre-modified oral input on the acquisition of word meanings. His sample consisted of 51 learners with low-proficiency in English. He divided the sample into two groups. One group received pre-

modified input, and for the other group input was interactionally modified. The subjects were asked to identify a kitchen appliance and to locate appropriately where it belonged in the picture of a kitchen. A pre-test was administered before the task, and following the task two post-tests and a follow-up test were given. The findings of the study revealed that, in the pre-modified directions, comprehension scores were positive yet low. Regarding the acquisition of vocabulary, scores tilted more towards the interactionally modified group than the pre-modified input group.

Input research has centered on the belief that mere exposure to the target language is not enough for the acquisition of a second language. It is essential that the learner comprehend the linguistic input. Krashen's Input Hypothesis proclaims that, to be of any help in the acquisition process, input needs to be comprehensible (1985 cited in Brown, 2000). In the above cited studies, researchers engaged in pre-modification of input to make it comprehensible to the learners. They did this through tempering with the quantity, redundancy and complexity of the information present in the input. Overall these pre-modification studies indicate that affects comprehension quite strongly. Yet, the role of premodification in comprehension seems to be more complicated than that suggested by the Input Hypothesis.

Above cited studies have assumed that acquisition will occur naturally if learners understand what is said to them, however they have not indicated what they mean by comprehension. Comprehension involves degrees of understanding and these studies do not clearly determine what degree of comprehension is needed to promote acquisition (Andersen & Lynch, 1988). White (1987) argues that the kind of simplified input that works well for comprehension may be of little value for acquisition because it deprives learners of essential information about the target language. It is claimed that when learners are able to understand the message they will not attend to form and therefore will not acquire. Sharwood Smith (1986) claims that there are two different ways of processing input depending on whether comprehension or acquisition is implicated. He argues that acquisition occurs only when learners discover that their original surface structure representation of the input does not match the semantic representation required by the situation. In other words, comprehension is necessary but not sufficient for acquisition to take place.

Furthermore, pre-modification of input adopts a static view of linguistic interaction and needs to be criticized in this regard. In this approach to simplification of input, all agency has been invested in the teacher. Therefore, the L2 learner is forced to wear the straightjacket of the prepackaged input without the chance to exercise initiative and indicate his comprehension or miscomprehension.

2.2. Interactionally modified input

After 1970s, interest in input modifications gradually declined and researchers shifted toward teacher talk

discourse. Teacher talk discourse refers to the general patterns of interaction between teachers and nonnative learners. Teacher talk, viewed in this way, is important in two respects. First, contributions of both conversation partners in classroom, namely, teachers and learners, are taken into account. Formerly, teacher talk was looked at as a language product, and nonnative learner was viewed as a passive receiver or consumer of that product. Conversely, in the interactional modifications approach, the process of communication in which both teacher and nonnative learners play their parts assumes more emphasis. Second, it is now clear that "input plus interaction" modifications are more influential than input modifications alone in boosting learners' comprehension (Lynch, 1996).

In this section, we turn to explore interactionally modified input. In this type of input, participants engage in conversation and, in the course of conversation, through negotiation of meaning clarify misunderstandings and repair communication breakdowns arising from linguistic difficulties. It was Long (1990) who drew a line between pre-modified input and interactionally modified input. Comprehension checks, confirmation checks clarification requests are but a few of special features of modified interaction which help the participants of a conversation to negotiate meaning. Communication breakdowns encourage L2 learners to negotiate solutions to these problems and in the process internalize new linguistic knowledge. Thus, Long's Interaction Hypothesis suggested that it is modified interaction which makes input comprehensible to the learners. This view is in stark contrast with Krashen's Input Hypothesis which stipulated that pre-modification and the use of context play a key role in making input comprehensible.

Negotiation of meaning is defined as "modification and restructuring of interaction that occurs when learners and their interlocutors anticipate, perceive, or experience difficulties in message comprehensibility" (Pica, 1994, p. 495). Ellis (1994) mentioned repetitions, confirmations, reformulations, comprehension checks, recasts, confirmation checks, and clarification requests as instances of modification and restructuring of interaction. In this part, we will attend to some of the studies which have focused on the relationship between interaction and acquisition.

Pica, Young and Doughty (1987) compared adjustments to input and interaction in classroom discourse to test the claim that better understanding is achieved through interaction modifications. 16 NNSs enrolled in low-intermediate ESL adult classes with European and Asian L1 backgrounds and 1 female NS participated in the study. 8 learners were assigned into the condition 1: linguistically adjusted script, and 8 learners were assigned into condition 2: interactionally modified condition. The task required NNSs to listen to the NS give directions and place 15 items on a small board illustrating an outdoor scene. Interactional modifications of input did lead to significantly greater comprehension than conventional ways of simplifying input. Comprehension was best when

the learners were allowed to interact. There was, also, evidence that, of the various types of interactional modifications, it was repetition that helped listeners most.

Pica (1991) compared the performances of 24 learners working on a layout task in one of three classroom roles. Eight negotiators heard the unmodified instructions and were encouraged to request help from the speaker when necessary. Eight observers performed the same task and were able to witness the other group's negotiations but themselves could not participate in them. Eight listeners completed the task separately from the negotiators and observers. The instructions for them were read aloud from the script incorporating typical input modifications. They were not allowed to ask for help or repetition. The negotiators did slightly better than both observers and listeners but there was no difference between the scores of observers and listeners. Pica's study offers another piece of evidence that active face to face negotiation between learners and teacher offers a more efficient route to listening comprehension than listening to pre-packaged modified input.

Ellis, Tanaka and Yamazaki (1994) conducted two studies to investigate the effects of modified interaction on comprehension and vocabulary acquisition. 79 third-year students at a public high school participated in the first study. 127 first-year high school students took part in the second study. A pretest was administered to the participants to identify a group of words unfamiliar to the participants. In the course of the study, the participants were asked to follow oral directions and place each mentioned object in the intended place. Two posttests followed the treatment and one month after the second posttest a follow-up test was administered. The second hypothesis of this report stipulated that input received through interaction would lead to higher levels of L2 comprehension in comparison to other kinds of input. Findings of the study showed that the students who negotiated their comprehension problems performed the directions more successfully. The third hypothesis of this research project predicted that learners who participate in interactive encounters would acquire more lexical items compared to other students who are exposed to other types of input. Students receiving negotiated input outperformed other learners in terms of retaining the new lexical items. The advantage evident in the immediate posttest persisted over time. The authors concluded that negotiated interaction promotes vocabulary acquisition. Yet, they also cautioned that the effect of interaction on the internalization of other aspects of second language should be explored in future studies.

Swain and Lapkin (1998) conducted a study of two grade 8 French immersion students. The students performed a jigsaw task in which each student in the dyad received a set of numbered pictures. The students worked together to put the story together and write it out. The researchers found evidence that learners use language as an embodiment of mental processes and, through this use, cultivate opportunities for themselves to acquire L2.

Learners used language to co-construct the language they needed to express the meanings they wanted to convey. Learners used their dialogues as both a tool for L2 learning and for communicating with each other. It is interesting to note that, although the correlation between pretest scores and the number of Language Related Episodes (LREs) was not significant, the correlation between posttest scores and the number of LREs was significant (.62; p = .04). This suggests that, quantitatively at least, the number of LREs and the posttest scores are positively related. From a research perspective, this study provides empirical data to suggest that collaborative dialogue (consisting of one or more LREs) is a useful concept for understanding L2 learning.

Mackey and Philp (1998) studied a sample of 35 adult ESL learners in Australia with mixed L1 backgrounds. Participants were placed in beginner and intermediate levels. Students were randomly placed into three groups: Interactor, Recast and Control. Participants worked in NS-NNS dyads and performed three tasks. The results suggested that advanced learners benefit from interaction with recasts more so than interaction alone.

Aston (1986) has pointed out that the forms used to realize the topic management functions associated with meaning negotiation can also be used to realize entirely different functions in conversational discourse. Therefore, what appears to be negotiation sequences may in fact not be and what seems to be successful comprehension may just be pretence.

Sometimes negotiation does not lead to native speakers comprehending nonnative speakers. The success of negotiation in this respect depends in part on the strategic abilities of the NNS and in part on whether they take the lead role in accomplishing the task (Gass & Varonis, 1994).

There is uncertainty as to whether comprehending input can contribute to acquisition. This concerns the validity of the interaction hypothesis. Comprehension is not a unitary phenomenon, but highly differentiated reflecting a continuum of understanding. Comprehension can be achieved by means of top down processing based on world knowledge and inference from context, while language acquisition requires bottom up processing involving attention to linguistic forms. In other words, comprehending input need not necessarily either facilitate or promote acquisition. Meaning negotiation may obviate the need for the learners to either attend to forms in the input or to use them in their own output (Sharwood Smith, 1986).

Interaction studies are limited in scope. They focus on interaction sequences involving negotiation of meaning, assuming that it is these that are crucial for acquisition. However, there is more to interaction than such sequences. It is argued that learners can acquire from exchanges that proceed smoothly without any communication problem (Wells, 1985).

Yet, it is also possible that in the process of negotiation of meaning L2 learners spend more time on task and

receive more input. Therefore, it may be stated that it is not the enhanced qualitative status of interaction that affords comprehension and acquisition, but that it is the quantity of input and time on task provided through interaction that makes a difference in terms of comprehension and acquisition. In some of the cited studies, time on task for interactionally modified input was measured to be twice the amount for pre-modified input.

2.3. Modification of information structure

Other than input and/or interaction modifications, there is some evidence for modification of information choice. Native speakers tend to use more concrete, more immediate topics in free conversation with nonnative listeners and provide more background detail (Lynch, 1996). EFL teachers adjust the amount and the type of information they provide to low and intermediate level learners in three ways: by describing in greater detail, by fleshing out the logical links explicitly, and by providing socio-cultural knowledge assumed to be lacking (Lynch, 1996).

In an experiment, Long and Ross (1993) examined the effects of text simplification and elaboration on the reading comprehension of L2 learners. They improved the comprehensibility of texts through elaboration. Key terms and concepts of the reading texts were expanded in parentheses so that the reader would have an increased chance of comprehending the texts through inferencing about those unfamiliar terms. Inferencing is optimized when textual coherence is established through repetition of major propositions within a text. New linguistic forms that students needed to learn were not removed. The semantic content of the original text remained intact. These steps were taken to prevent producing unnatural target language models. The study involved 483 Japanese college students studying English as a Foreign Language (EFL) for at least 8 years. The aim was to measure and compare their reading comprehension of unmodified, simplified, and elaborated texts. The study found that students who read the simplified passages scored higher on a multiple-choice comprehension test than students who read the unmodified version. Students who read the elaborated versions of the passages scored higher than those who read the unmodified versions, but not statistically significantly so. Authors argued that the reason for this lied in the fact that, as an accidental by-product of the elaboration process, elaborated passages in this study were an average of one grade level harder in readability, 16% more complex in words per sentence, and nearly 60% longer than the unmodified passages. Each of these qualities must have worked against students reading the elaborated texts, their greater length potentially being especially problematic given that the same amount of time was allowed subjects in all three groups. The study also found that there was no statistically significant difference between the reading scores of students who read the simplified and elaborated versions of the passages.

Yano, Long, and Ross (1994) hypothesized that elaborative modification involving redundancy explicitness might be able to act as an alternative to written text modification. They suggested that redundancy and explicitness could compensate for unknown linguistic items and conducted a study to test the hypothesis. Modification of written texts in terms of linguistic features makes them more comprehensible for nonnative speakers, but removes unfamiliar linguistic items that L2 students need to acquire, thus reducing their utility for language learning. 13 reading passages were randomly presented to 483 Japanese college students in one of three forms: native baseline, simplified, or elaborated. A 30 item multiplechoice test was used to measure comprehension. Learners reading the simplified version performed the best on the comprehension test. Their performance significantly different from those who read the elaborated version. This indicated that modification of information structure was as effective as the linguistic simplification of

In a quantitative study, O'Donnell (2009) explored the possibility of using textual elaboration for the modification of literary texts in an intermediate-level Spanish as a second language course. The study revealed that elaborative modifications enhanced the accessibility of literary texts for lower proficiency students so that these texts could play an expanded role in L2 instruction. L2 readers who read short elaboratively modified literary texts recalled more information about the texts and identified more vocabulary that appeared within the texts.

Li, Wang, and Xu (2005) compared the effects of simplification and elaboration on second language learners' reading comprehension. They presented three English reading passages to forty-eight Filipino high school students in one of the three forms- baseline, simplified and elaborated. To measure the participants' reading comprehension, the students were asked to answer three types of comprehension questions: general, specific and inferential. Though both types of modified written input were more comprehensible than unmodified written input, the results indicated that simplified passages were easier to comprehend than elaborated passages. Yet, Moradian, Naserpoor and Tamri (2013) observed that while simplification and elaboration are both helpful in enhancement of comprehension, they are not significantly different in enhancing the rate of comprehension.

Ellis (1994) cautioned that offering detailed additional information to low proficiency listeners, rather than making communication easier, may bombard the listener with unnecessary information. Rather than improving comprehension and hopefully acquisition, the verbosity that results from elaborations may task the learner's memory and prevent him from attending to the message or the learnable linguistic features.

Again, the question of quantity appears here. The observed effect for modification of information structure may relate to the increased amount of input and lengthened period of time on task provided through such modification.

It is not the modification of information structure per se that helps with the comprehension or acquisition, rather it is the increased quantity of input and the longer time on task that affords improvements in comprehension and acquisition.

3. DISCUSSION

This paper described three ways of making input comprehensible to L2 learners: pre-modification of input, interactional modification, and modification of information structure. Ellis (1994) claimed that comprehending input does not automatically result in acquisition. Several authors have corroborated this stance. Pica (1994) pointed out that establishing a causal relationship between comprehending input and the acquisition of linguistic forms is difficult.

An indirect relationship seems to exist between negotiation and acquisition. In interactive encounters, a learner may notice differences between his inter-language and the L2 forms. As the learner becomes aware of such differences, he might make amends to his linguistic output. This stance is very close to Long's (cited in Ellis, 1990) viewpoint where he maintained that modified interaction would indirectly affect acquisition. Comparison of the effectiveness of pre-modified input and interactional modifications in Pica, Young, and Doughty's (1987) study indicated that learners who were allowed to interact with the teacher to clarify a difficult version of a listening text scored higher than those who heard a simplified version but could not interact with the teacher. In the same vein. Ellis, Tanaka and Yamazaki (1994) reported that learners receiving input through negotiated interaction attained higher comprehension scores in L2. In addition, these learners were more successful with regards to the acquisition of new lexical items. While these findings are encouraging, the controversy over the influence of interaction on acquisition is not yet fully resolved. Apparently, comprehensible input promotes acquisition, but the strength of the links between the two variables is uncertain.

Furthermore, for interaction modifications to work, there has to be a genuine interaction between teachers and learners. Interacting requires attention to what the other people are saying (Lynch, 1996). Interactive negotiation with a group of students is less straightforward than when talking to one listener. Ellis (1994) has pointed out that the teacher has to decide about modification by assessing the class's overall level of proficiency subjectively. Consequently, teacher talk will be less finely tuned to the level of the learners in classes. A classroom atmosphere in which students feel free to make clear when they have comprehension difficulties is a better basis for deciding when and how we should modify.

Teachers prevent comprehension problems through premodifying and remedy them through interaction, provided the learners indicate their difficulties. In either case, the research shows that teachers need to use more words, and therefore take more time, when talking to elementary learners (Lynch, 1996). The evidence from research on discourse modifications could be summarized as follows: modification of input helps, modification of interaction helps more, modification of information choice might hinder in some circumstances.

4. CONCLUSION

In this paper, we have summarized some of the evidence that the adjustments made for the intended benefit of learners do help them to achieve greater levels of comprehension measured in a variety of ways. Research comparing the potential benefits of adopting one type of modification rather than another suggests that interaction offers the most effective route to understanding. In practice, however, teachers may combine a number of different modification tactics, for example checking comprehension (interaction modification) and then repeating problematic words more slowly and clearly (input modification) to enhance the learners' understanding.

Research into teacher talk assumed that once the message is modified and supposedly made comprehensible, the learner may notice and later use new items of language contained in the message. Long (1985 cited in Lynch, 1996) stated that there is a three step argument for the research into the connection between input, interaction, and learning: discourse modifications promote the comprehension of input, comprehensible input promotes learning, and discourse modifications promote learning.

Based on the proposition that teachers' modifications facilitate learner comprehension, it would have been expected from researchers to measure differential effects of various types of modification on learner understanding. But, since assessing the success of modifications was/is not a straightforward matter, early research into teacher-learner communication was limited to descriptions of the teacher performance and teacher-learner interaction (Chaudron, 1983). To address this problem, a large number of research studies have attempted to measure the differential effects of various modifications on learner comprehension.

REFERENCES

- [1] Andersen, A. & Lynch, T. (1988). *Listening*. Oxford: Oxford University Press.
- [2] Aston, G. (1986). Troubleshooting in interaction with learners: The more the merrier? *Applied Linguistics* 7, 128-143.
- [3] Brown, H. D. (2000). *Principles of language learning and teaching*. New York: Longman.
- [4] Cervantes, R. & Gainer, G. (1992). The effects of syntactic simplification and repetition on listening comprehension. *TESOL Quarterly* 26, 767-770.
- [5] Chaudron, C. (1983). Simplification of input: Topic reinstatements and their effects on L2

- learners' recognition and recall. *TESOL Quarterly* 17, 437-458.
- [6] Chiang, C. S. & Dunkel, P. (1992). The effect of speech modification, prior knowledge and listening proficiency on EFL lecture learning. *TESOL Quarterly* 26, 345-374.
- [7] Ellis, R. (1990). *Instructed second language acquisition*. Oxford: Blackwell.
- [8] Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- [9] Ellis, R. (1995). Modified oral input and the acquisition of word meanings. *Applied Linguistics 16*, 409-441.
- [10] Ellis, R., Tanaka, Y. & Yamazaki, A. (1994). Classroom interaction, comprehension, and the acquisition of L2 word meanings. *Language Learning* 44, 449-491.
- [11] Gass, S. & Varonis, E. (1994). Input, interaction, and second language production. *Studies in Second Language Acquisition 16*, 283-302.
- [12] Grifith, R. (1990). Speech rate and NNS comprehension: a preliminary study. *Language Learning* 40, 311-336.
- [13] Li, Y., Wang, Q. & Xu, S. (2005). The effects of simplified and elaborated texts on second language reading comprehension: An exploratory study. *Vigo International Journal of Applied Linguistics* 2, 45-74.
- [14] Long, M. & Ross, S. (1993). Modifications that preserve language and content. In M. Tickoo (Ed.), *Simplification theory and application* (pp. 29-52). Singapore: SEAMEO Regional Language Centre.
- [15] Lynch, T. (1996). Communication in the language classroom. Oxford: Oxford University Press.
- [16] Mackey, A. & Philp, J. (1998). Conversational interaction and second language development: Recasts, responses, and red herrings? *The Modern Language Journal* 82, 339-356.
- [17] Moradian, M. R., Naserpoor, A. & Tamri, M. S. (2013). The effects of lexical simplification and elaboration of ESP texts on Iranian EFL university students' reading comprehension. International Journal of Psychology and Behavioral Research 2(6), 332-338.
- [18] O'Donnell, M. (2009). Finding middle ground in second language reading: Pedagogic modifications that increase comprehensibility and vocabulary acquisition while preserving authentic text features. *The Modern Language Journal 93*, 512–533.
- [19] Osborne, D. (1999). Teacher-talk: A sociolinguistic variable. *English Teaching Forum* 37, 10-13.
- [20] Pica, T. (1991). Classroom interaction, negotiation and comprehension: Redefining relationships. *System 19*, 437-452.



- [21] Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, process, and outcomes? *Language Learning* 44, 493-527.
- [22] Pica, T., Young, R. & Doughty, C. (1987). The impact of interaction on comprehension. *TESOL Quarterly* 21, 737-758.
- [23] Sharwood Smith, M. (1986). Comprehension vs. acquisition: Two ways of processing input. *Applied Linguistics* 7, 239-256.
- [24] Swain, M. & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French

- immersion students working together. *The Modern Language Journal* 82, 320-337.
- [25] Wells, G. (1985). Language development in the pre-school years. Cambridge: Cambridge University Press.
- [26] White, L. (1987). Against comprehensible input: The input hypothesis and the development of second-language competence. *Applied Linguistics* 8, 95-110.
- [27] Yano, Y., Long, M. & Ross, S. (1994). The effects of simplified and elaborated texts on foreign language reading comprehension. Language Learning 44, 189–219.