The Role of Grammatical Knowledge in Word-Meaning Inferencing

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Abstract

The role of grammatical knowledge in word meaning inferencing has not received proper attention in L2 research. Addressing this issue, the present study provides some empirical data to examine the contribution of grammatical knowledge to getting the meaning of unknown words. In their daily life, L2 learners encounter lots of unfamiliar words which they have to guess their meanings. Therefore, students draw on various strategies to arrive at the right track. One of the most important assets the learners depend on is the knowledge of grammar. To this end, the researcher's aim is (a) to see if grammatical knowledge plays any significant role in word guessing and (b) to see to what extent grammar improves guessibility. For this purpose, twenty participants took part in this study. To evaluate their knowledge of grammar a test of TOEFL was given to them. Then a forty-five item test on vocabulary was administered to see how grammar knowledge can affect their ability in guessing. The findings indicate that grammar knowledge is a key factor in deciphering the meanings of unknown words. It is further shown that knowledge of grammar enhances the learners' guessing ability to a great extent. Therefore, an explicit instruction of grammatical structures in L2 contexts is recommended.

keywords: grammatical knowledge; explicit instruction; guessibility; inference

Introduction

The ability to decipher the meaning of the text (both written and spoken) is one of the most important skills required of people in second and foreign settings. Today we face with lots of input (written and spoken) in our daily life. Lots of this input is unknown to us, therefore, we need to guess. Any understanding of reading texts and knowing the utterances requires attention to a number of factors. One fundamental factor is the knowledge of grammar.

Knowing words is the key to understanding and be understood and the bulk of learning a new language consists of learning new words. Since we face with lots of new vocabulary in our reading and listening, one good technique is to guess the meaning of unknown words. In many cases this attempt fails because we do not know the grammatical structure of the sentences.

There seems to be a general consensus among educationists that learners' exposure to sufficient comprehensible input is one of the requirements for learning to take place. In reality, however, learner's exposure to incomprehensible input is unavoidable. One major source of incomprehensibility seems to be related to unknown lexical items in input. In such contexts, learner's primary task is to discover the meaning of unknown words .

To illustrate how learners deal with unknown words, Read (2000) refers to initial evaluation of the unknown word in terms of its contribution to the general understanding of the texts, learners normally evaluate the contribution of the unknown words to their general understanding. If an unknown word is not regarded as having a major impact on comprehension, it is normally ignored, on the other hand, if it is judged to have a great contribution to determining the meaning, a variety of strategies are used to disambiguate it. Most often learners tend to infer the meaning of unknown words from context. This as Read (2000) suggests is considered desirable on the grounds that" it involves deeper processing that is likely to contribute to better comprehension of the text as a whole and may result in some learning of the lexical item that would not otherwise occur (p.53).

Learning to read in a second language is one of the most valuable skills L2 learners should develop for social and academic purposes. This makes reading an active process and a demanding skill as readers are required to use the background knowledge, the grammatical knowledge, the situational context and the contextual clues to construct an interpretation of the meaning of a text (Pritchard ,1990. Brantmerier, 2003b) .As such a growing body of research on reading has focused on how readers :

- a) utilize background knowledge to construct a model of text (e.g., Brantmerier, 2003b; Johnson,1982; McNamara et al., 1996; Pritchard, 1990);
- b) use L2 grammatical knowledge to understand text (e.g., Anderson ,1984; Alderson and Urquhart,1984; Brantmerier ,2003b; Hammandou –Sullivan,1991) and c) employ strategies to comprehend texts(e.g., Young and Oxford, .1997; Laufer,1997; Halldorson and Singer , 2002; Gritffith ,2003; Frantzen,2003). The influence of background knowledge on reading comprehension has been investigated extensively. Differences in prior knowledge impact the usefulness of different resources available to learners and result in degrees of learning. The facilitating effect of background knowledge on reading comprehension has been demonstrated. For example, examining the effect of linguistic complexity and cultural origin of a text, Johnson(1982) found that cultural origin of the text had

more impact on the comprehension of the L2 students than the semantic and syntactic complexity.

Research has shown that intermediate and advanced EF learners guess their vocabulary to a great extent through adjacent words and grammatical structure of the sentence .

Readers' vocabulary knowledge is an essential prerequisite for inferencing (Barnett,1989;Kelly;1990; Huckin; and Coady;1999). When readers come across unknown words they may be unable to make use of available contextual clues because the words that may be used to disambiguate an unknown word are unknown. Thus, usable context is affected by the proportion of known to unknown words; when there exists a large proportion of unknown to known words, learners may be unable or reluctant to use contextual clues for inferencing word meaning.

Grammar knowledge has a significant impact on inferencing .The role of grammar in L2 learning and processing is well acknowledged (Haastrup; 1991; Kelly.,1990; Paribakht and Weshe;1999; Paribakht;2004).

However,as Paribakht (2004) mentions 'it is far from clean how grammatical knowledge can assist learners in their L2 lexical processing and subsequent vocabulary acquisition' (p. 149). There are only few studies indicating that grammar knowledge is involved in L2 lexical processing (e.g., Paribakht and Weshe ,1999; Paribakht, 2004). Concurring with the view that grammar knowledge influences inferencing, Haastrup(1991)notes "lexical inferencing involves making informed guesses as to the meaning of a word in light of all available linguistic cues in combination with the learners' general knowledge of the world, her awareness of the context and her relevant linguistic knowledge" (p.40).

Lexical inferencing is the most frequently used strategy by EFL learners (Oxford ,1990;Paribkht , 2004; Kaivanpanah ,2004). Consequently an in-depth understanding of factors influencing inferencing may not only help us develop insights into the nature of comprehension processes, it may , as Paribakht(2004) suggests "shed some lights on the role knowledge of grammar may play in lexical processing'(p.150). In this connection, the main focus of this research would be on whether grammatical knowledge has any impact on guessing words . Unfortunately grammar teaching has always been one of the most controversial and least understood aspects of language teaching. Few teachers remain indifferent to grammar and many teachers become obsessed by it.

Research Questions

Although teaching grammar in learning an L2 is much maligned by L2 teachers, it is widely used in L2 learners' production process. It appears that L2 learners often use their grammar as a sentence – making machine. It means that the teaching of grammar offers the leaner the means for potentially limitless linguistic creativity .Also, grammar functions as an advance organizer for later acquisitions of the language especially for inferencing the meaning of unknown

words. However, relatively little research attention so far seems to have been devoted to a consideration of role of grammar in second language acquisition (SLA).

Grammar is a tool to produce and to receive the language effectively .Thus, this study aims to explore the role of grammatical knowledge in words meaning inferencing, particularly in terms of sentence and reading comprehension. Therefore, according to the afore - mentioned paragraphs, the following research questions are to be addressed in this research:

- 1. Does the knowledge of grammar have an effect on meaning inferencing?
- 2. To what extent does the knowledge of grammar have an effect on meaning inferencing?

Research Hypotheses

Although a growing number of researchers have considered the positive potential of using the knowledge of grammar in SLA and SLT, very little attention has been given specifically to the effect of this knowledge on word meaning inferencing. In this regard, the present study is concerned with investigation of the following research hypotheses:

H0: There is not any effect from grammar on word meaning inferencing.

H1: Grammar has an effect on enhancing L2 learners' guessibility.

Learning language is probably the most complex type of learning among human beings. Within language, learning vocabulary as one of the important components of language knowledge seems to be of critical important to both native and non-native speakers of a language. Whereas the number of syntactic patterns that language learners have to learn is finite, vocabulary is an unending task within which continues to be learned throughout one's lifetime.

Researchers have shown that lexical errors impede communication more seriously than grammatical ones (Ellis ,1991; Laufer , 1997). Furthermore, it has been argued that vocabulary knowledge can help grammar acquisition and vice versa.

According to Ellis(1991), the main reason for believing that lexical knowledge can help grammar acquisition is that knowledge of the words in a text permits learners to understand the meaning of the discourse which is in turn allows them to understand the grammatical patterning .

Vocabulary knowledge is also considered as a prerequisite factor in reading comprehension, a fact that has been recognized in the literature available so far (Anderson 1991).

With such a bulk of knowledge in vocabulary learning, learners should use different strategies in order to cope with the huge number of words in daily life. Learners at all proficiency levels come across texts they don't comprehend. Therefore, they should develop certain strategies to understand what they read.

L2 proficiency as (Haastrup 1991) notes is a decisive factor in lexical inferencing procedures and there definitely seems to be a threshold level of L2 proficiency that learners have to reach first before they are able to use effective inferencing procedures .

L2 beginners resort to inferencing because there are many unknown words that should be checked in a dictionary. Advanced language learners tend to infermore

since they know enough words and on the basis of the sufficient and clear context created by the known words they feel they can infer the meaning of unknown words.

Learners' attention to details in the text also affects comprehension (Frantzen, 2003). Investigating lexical inferencing of Spanish students, she argues "all readers are at times inattentive to details in context that should help them infer correct meaning. Inattention occurs not only when reading difficult passages where it is more understandable, but also in easier context" (p.189) Among the factors the learners use in their guessing, grammatical knowledge is a vital one. A factor which has been less focused in the literature. Therefore, the present study tries to convince the teaching of grammar in all levels and all settings especially in a foreign setting which little input is available to master a language. When we go through the textbooks we see a great number of them lack enough grammar practices, that's due to the fact that is believed grammar is finite and it is not necessary to take it into our syllabus.

This study can probably establish a good relationship between the level of grammar knowledge and its role on word guessing. With these points in mind, we can come to a fact that a sound knowledge of grammar is essential if the learners are supposed to read widely in the life. Grammar helps learners in many aspects, the main one is guessing unknown words.

Method

Participants

A sample of twenty students studying English at Saee Institute volunteered as participants. These students have been learning English in this center for four years. When they began their education here they were students of junior high school. They only were familiar with very little English. They were taught English Chatterbox One. These learners received fifty hours of teaching for each term. They have passed eighteen terms in this institute. One the whole, their total time which is spent on learning English is about nine hundred hours. As the elementary course, the books Chatterbox series were introduced and taught .They could pass Chatterbox one to six in one and a half years. During these terms they learned the most frequent tenses like simple present, past tenses, present perfect and present continuous. They were taught how to use these tenses and their vocabulary to make sentences. In each term at least one supplementary book about English stories was introduced at the beginning of the semester to enhance their command in retelling stories based on

vocabularies and structures they had received. After Chatterbox series, Interchange series were introduced to them. At this time, they were encouraged to use the knowledge of English for all four skills.

They were taught lots of structures, grammar, words and idioms during these series. They became fluent speakers in English. The main focus of teaching during these terms was to use what they knew. Therefore, the students were placed in different situations and they had to take part in dialogues and discussions to get the message across. The last four terms were spent on Passages written by Jack.C. Richards. The focus of teaching at this level is discussion and writing. A topic is introduced to the learners so they have to share their ideas and from time to time they have to write a passage about the topic.

Materials

Vocabulary test

First of all, we must be sure that the students do not know the meaning of the words. To this end, one hundred and eighty words were randomly chosen from a good book. The name of the book is 'VOCABULARY' written by Harold Levine. The words belonged to all parts of speech. We tried to write words which the students had no knowledge. We listed the words and asked them to write a definition a synonym or opposite for the words. Of course, they could write their Persian equivalents to show that they knew their meanings.

Grammar Test

We had to evaluate the students knowledge of grammar, therefore, a sixty item test was prepared. Our grammar test was extracted from TOEFL. We chose TOEFL because the tests in TOEFL are standard and have a high level of validity and reliability. The items belonged to different grammatical structures including tenses, conditional sentences and lots of things.

Unknown Words in Context

Out of one hundred and eighty words which were given to students to write their meanings, there were about seventy words none of the participants could write their meanings. Therefore, from this unknown group we chose forty five words randomly. We prepared another test based on these unknown words. Actually, we grammaticalized the words, in other words we provided grammatical contexts for this list of unknown words.

Our purpose here was to see how grammatical knowledge of the learners could affect their ability to guess the words they previously could not define. It is obvious that the learners used many local and global strategies to come across the right meanings. One fundamental strategy they would use is their grammatical knowledge. In other words, they focus on 'immediate grammar' to see how words are related to guess the unknown words.

Procedure

Based on the purpose of the study, three tests were prepared and conducted in a one week period. The first one was a one hundred and eighty word test. This

test was in the format of an essay- type test. There were words with enough space provided asking students to write the Persian equivalents, synonyms or opposites to indicate that they knew the meanings of the words. The time allocation for this exam was forty minutes. Our aim for this exam was to extract the words which were unknown to all participants. After the exam, we ticked those words which were answered correctly. Since we needed the unknown words we searched for words which nobody could answer. Then, we found eighty words which were unknown to all participants. We listed those words. Two days later, another test was conducted under the supervision of the researcher. It was a grammar test in a multiple choice format. Our aim here was to evaluate the students' knowledge of grammar. To have a valid test we used a test from TOEFL. This test which had sixty items included varied grammatical structures. It tested tenses, parts of speech, complex sentences, conditional and many more. The time allocation for this second test was thirty minutes. By the students' scores we received, the students were divided into three groups based on their performance on this grammar test: advanced group, intermediate group and lower intermediate. We wanted to see if those students with a better knowledge of grammar could predict and guess those words which previously they were unable in a context free situation. Our next step was to grammaticalize those unknown words which were unknown to all participants. Forty five words from those eighty unknown words were selected randomly. Those forty five words were inserted in some grammatical structures. Therefore, we had a forty -five sentences each included one of those unknown words. Those words were underlined asking students to write the Persian equivalents, synonyms or opposites in the space provided, in fact this test was an essay one again. The time allocation for this test was thirty minutes. We used some statistical data to examine the relationship between the knowledge of grammar and word guessing ability.

Data Analysis

The researcher calculated two scores for each participant. A test of grammar with sixty items was given to the learners. Also, a test of vocabulary with forty five items was conducted. In order to find the means, standard deviation between these two tests the researcher uses Excel and SPSS.

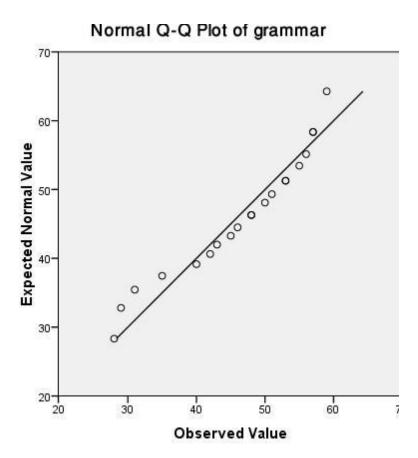
The participants were awarded a score of 1 each time they judged a sentence correctly. Incorrect judgments, non-sure judgments and failures to respond to a question in the test were all scored 0. The mean and standard deviation of different learners' grades were calculated. The first test (the grammar test) was a multiple choice one so there was a key to the questions. But the second test (the vocabulary test) was an essay type one so it was subjective and the rater who was the researcher of the study scored true and near true answers.

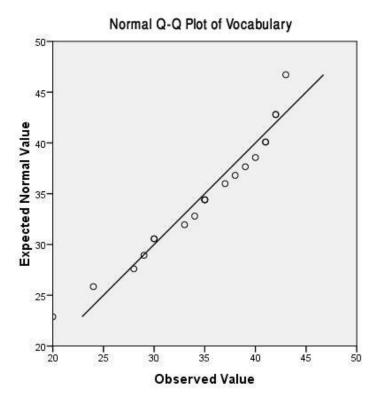
The scores on the grammar and vocabulary were entered into SPSS and the researcher calculated the frequency and different parameters for the students. T-Test and paired samples tests were used to receive the mean, mode, median and

the standard deviation of the scores. To see the correlation of the two tests the researcher drew some graphs. These graphs showed a positive relationship between grammar and vocabulary.

Results

Correlational research as a quantitative research method is based on the assumption that the real world is a network of connected elements and variables. Things are associated with one another. No phenomenon is isolated or discrete. A phenomenon is a system with different elements that interact and influencing one another. Things have effect on other things and are affected by a host of other factors. It is a web of relations and interactions. Experimental research assumes that there is a relationship between the two variables. In fact, before we investigate casual relationship, we should make sure they are correlated. Correlational studies function as pre-tests for experiments. In fact, two variables can't be in a cause-effect relationship if they are not correlated. The relationship between two variables is indicated by correlation coefficient. Correlation coefficient is a measure of association, the degree of go — togetherness. It shows how two or more variables vary together. The correlation coefficient is a number that can be calculated. There are two aspects to the coefficient: size (strength) and direction.





Cumulative percent of grammar

grammar								
Frequency Perc		cent	Valid	Cumulative				
			Percent	Percent				
Valid	28.00	1	5.0 5.0	5.0				
29.00	1	5.0	5.0	10.0				
31.00	1	5.0	5.0	15.0				
35.00	1	5.0	5.0	20.0				
40.00	1	5.0	5.0	25.0				
42.00	1	5.0	5.0	30.0				
43.00	1	5.0	5.0	35.0				
45.00	1	5.0	5.0	40.0				
46.00	1	5.0	5.0	45.0				
48.00	2	10.0	10.0	55.0				
50.00	1	5.0	5.0	60.0				
51.00	1	5.0	5.0	65.0				
53.00	2	10.0	10.0	75.0				
55.00	1	5.0	5.0	80.0				
56.00	1	5.0	5.0	85.0				

57.00	2	10.0	10.0	95.0
59.00	1	5.0	5.0	100.0
Total	20	100.0		100.0

The above table shows the grammar scores from the lowest to the highest. We can see the frequency of the scores. For, example, the frequency of the score 48 is 2. It means that there are two students who got 48 on the grammar test. So the percent for this score is 10%. For those scores which appear once on the test the percent is 5%. In this table the cumulative percent of the scores is also showed.

Conclusion

The study described in this paper set out to answer two inter-related questions regarding whether grammar has any effect on guessing and second how much this impact would be. The findings displayed that knowledge of grammar plays a vital role in learning a foreign language. This kind of knowledge helps not only vocabulary acquisition but also vocabulary guessing. As learners encountered by new contexts we meet lots of new words we haven't seen before. We draw on many different methods to get their meanings. Unfortunately, the importance of grammar in L2 teaching and learning has been ignored for many reasons. The fact shows that grammar can help learners in many aspects because it serves as a tool to self-correct and self-edit the utterances we produce or receive in our daily life. Grammar in its broadest sense means knowledge of vocabulary formation and knowledge of sentence formation. We can make a comparison in this regard. A house is composed of many different materials, when we know how these materials are mixed together we would better get the knowledge of a bigger construction like a building. As we have seen in chapter four those learners who are better at grammar are better in understanding the meanings of the unknown words. In our pedagogical setting grammar teaching should be focused more, since it enhances the language learning in all aspects. By what we understand from chapter four, we are sure that knowledge of grammar has a vital effect on meaning inferencing. Therefore, the answer to our first researcher question is yes. Our second question was how much this knowledge affects on vocabulary guessing. By looking at the scatterplot and examining the correlation between these two variables, we see that these two sets of scores are positively correlated. It means that grammar is a very important factor in deciphering the meanings of unknown words in a text. The importance of vocabulary learning is obvious to almost all educationalists and learners. This is the first thing which a foreign learner encounters while

entering the class. They have to deal with words in many different ways. Also, they have to memorize the words for their communication. But the importance of grammar in a foreign setting has been overlooked by many experts and learners. They do not know the value of grammar and its role in learning a foreign language. Perhaps, this is the case because of the way grammar is taught. Instead of throwing grammar away from our books and our syllabus, we as teachers and scholars should find some new methods and ways to teach grammar in a fun and lively manner.

Teaching grammar is said to be boring because I think this teaching does not aim at an communicative goal. Grammar is a tool like words for communication. To have a better command on our communication with other speakers we must develop not only our word power but also our grammar power. This grammar gives us chances to use words effectively and efficiently in our speech and our writing.

As was mentioned before, grammar is a sub skill which can have vital impact on other skills. We could become better guessers, better speakers and writers just by knowing enough grammar. Language without grammar is a list of words. Words by themselves are not enough communicative to transfer meanings and messages. My final word is that pedagogical grammar is necessary and should be an essential part of our syllabus.

References

Anderson, 1991 N.J. Anderson, Individual differences in strategy use in second language reading and testing, Modern Language Journal 75 1991, pp. 460–472.

Alderson and Urquhart, 1984 In: J.C. Alderson and A.H. Urquhart, Editors, Reading in a Foreign Language, Longman, London 1984.

Appel, G., Lantolf, J. 1994. Negative feedback on regulation and second language learning in the zone of proximal development. The Modern Language Journal 784: 465-83.

Bachman, L., Palmer, A., 1996 .Language Teaching in Practice .Oxford University Press, Oxford.

Barnett, 1989 M. Barnett, More than Meets the Eye, Prentice Hall Regents, NJ 1989.

Batstone, R., 2002a. Making sense of new language: a discourse perspective. Language Awareness 11 1.

Batstone, R., 2002b. Contexts of engagement: a discourse perspective on 'intake' and 'pushed output'. System 30, 1–14.

Bensoussan and Laufer, 1984 M. Bensoussan and B. Laufer, Lexical guessing in context in EFL reading comprehension, Journal of Research in Reading 7 1984, pp. 15–31.

Canale, M., Swain, M. 1980. Theoretical basis of communicative approaches to second language teaching and testing. Applied Linguistics 1: 1-47.

Carnine et al., 1984 D. Carnine, E.J. Kameenui and G. Coyle, Utilization of contextual information in determining the meaning of unfamiliar words, Reading Research Quarterly 19 1984, pp. 188–204.

Carton, 1971 A.S. Carton, Inferencing: a process in using and learning language. In: P. Pimsleur and T. Quinn, Editors, The Psychology of Second Language Learning, Cambridge University Press, Cambridge 1971, pp. 45–58.

Catalan, 2003 R.M.J. Catalan, Sex differences in L2 vocabulary learning strategies, International Journal of Applied Linguistics 3 1 2003, pp. 54–74.

Celce-Murcia, M., Dornyei, Z., Thurrell, S. 1997. Direct Approaches in L2 Instruction: A Turining Point in Communicative Language Teaching? TESOL Quarterly, 31: 141-152.

Chaudron, C. 1985 Intake: on models and methods for discovering learners' processing of input. Studies in Second Language Acquisition 7, 1-14.

Coady and Huckin, 1997 In: J. Coady and T. Huckin, Editors, Second Language Vocabulary Acquisition: a Rationale for Pedagogy, Cambridge University Press, Cambridge 1997.

Cohen, 1998 A.D. Cohen, Strategies in Learning and using a Second Language, Longman, London 1998.

Cook, G., 1989. Discourse. Oxford University Press, Oxford.

Cook, G., 2001. The philosopher pulled the lower jaw of the hen: Ludicrous invented sentences in language teaching. Applied Linguistics 22 3, 366–387.

ELLIS, R. 1990 Instructed Second Language Acquisition. Oxford: Blackwell.

Ellis, R., 1991. Grammar teaching – practice or consciousness-raising. In: Ellis, R. Ed., Second Language Acquisition and Second Language Pedagogy. Multilingual Matters, Clevedon.

ELLIS, R. 1992 Second Language Acquisition and Second Language Pedagogy. Clevedon: Multilingual Matters.

Ellis, R. 1997. SLA research and language teaching. Oxford: Oxford University Press.

Grandy, 1992 R.E. Grandy, Semantic fields, prototypes, and the lexicon. In: A. Lehrer and E.F. Kittay, Editors, Frames, Fields, and Contrasts: New Essays in Semantic and Lexical Organization, Lawrence Erlbaum Associates, Publishers, New York 1992, pp. 105–120.

Gregg, K. 1984. Krashen's monitor and Occam's razor. Applied Linguistics 5: 79-100.

Griffiths, 2006 C. Griffiths, Strategy development and progress in language learning, Prospect 21 2006, pp. 58–75.

Johnson, K., 1988. Mistake correction. ELT Journal 42, 89–101.

Johnson, K. 1995. Understanding communication in second language classrooms. New York: Cambridge University Press.

Johnson, K., 1996. Language Teaching and Skill Learning. Blackwell, Oxford. Kaivanpanah, 2004 Kaivanpanah, Sh., 2004. Guessing word-meaning: how reliable learners' assessments are? In: Paper presented at 11th TESOL Arabia convention. UAE, Dubai.

Kelly, 1990 P. Kelly, Guessing: no substitute for systematic learning of lexis, System 18 2 1990, pp. 199–207.

Laufer and Sim, 1985 B. Laufer and D.D. Sim, Taking the easy way out: non-use and misuse of contextual clues in EFL reading comprehension, English Teaching Forum 23 1985, pp. 7–10.

Laufer, 1991 B. Laufer, The development of L2 lexis in the expression of the advanced learner, The Modern Language Journal 75 1991, pp. 440–448.

Mackey, A., Gass, S., McDonagh, K., 2000. How do learners perceive interactional feedback? Studies in Second Language Acquisition 224, 471–497.

McCarty, 2005 In: T. McCarty, Editor, Language, Literacy, and Power in Schooling, Lawrence Erlbaum Associates, Mahwah, NJ 2005.

McLaughlin, B. 1987. Theories of second language acquisition. London: Edward Arnold

McNamara et al., 1996 D.S. McNamara, E. Kintsch, N.B. Songer and W. Kintsch, Are good texts always better? Text coherence, background knowledge, and levels of understanding in learning from text, Cognition and Instruction 14 1996, pp. 1–43

Nassaji, 2003 H. Nassaji, L2 vocabulary learning from context: strategies, knowledge sources, and their relationship with success in L2 lexical inferencing, TESOL Quarterly 37 2003, pp. 645–670.

Rutherford, W. 1987 Second Language Grammar: Learning and Teaching. London: Longman. Sharwood Smith, M. 1981 Consciousness-raising and the second language learner. Applied Linguistics2, 159-168. Salataci and Akyel, 2002 R. Salataci and A. Akyel, Possible effects of strategy instruction on L1 and L2 reading, Reading in a Foreign Language 14 1 2002, pp. 1–17.

Schmitt, 1998 N. Schmitt, Tracking the incremental acquisition of second language vocabulary: a longitudinal study, Language Learning 48 1998, pp. 281–317.

Sharwood Smith, M., 1981. Consciousness-raising and the second language learner. Applied Linguistics 2, 159–169.

Young and Oxford, 1997 D.J. Young and R. Oxford, A gender-related analysis of strategies used to process input in the native language and a foreign language, Applied Language Learning 8 1997, pp. 43–73.