Interaction between L1 and L2 Communicative Language Competences

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The paper focuses on a study whose aim was to look into interactions between L1 and L2 communicative language competences of EFL language users. The author looks into primary school (year 8) learners' performances on communicative language tests that measured both their L1 and L2 competences. The sample included close to 400 participants with differing starting age in EFL learning. The tests had the same underlying design in both languages. Results of L1 measures were compared with results on L2 tests. Findings were analyzed at several levels.

Cook's (1991) introduction of the notion of multi-competence as knowledge of two or more languages in one mind has given rise to looking at second language acquisition from a new perspective. Second language (L2) users have stopped being treated as failed native speakers and language acquisition research now focuses on understanding what makes L2 users what they are. This is a significant shift from a monolingual perspective of looking at the L2 user's competence and performance. Analyses of L2 competence have now, on the one hand, begun to take into account L1 competence of the language learner/user (Cook 2002) and, on the other, L1 competence analyses are beginning to take into account the L1 user's competence in one or more other languages (Cook 2003).

The concept of linguistic competence as proposed by such linguists as Fries (1945) and Lado (1964) followed the structuralist school, according to which competence was to be defined by three language components (phonological, morpho-syntactic, lexical) and four language skills (listening, reading, speaking, writing) components. It was replaced by Canale's (1983) conceptualisation of communicative competence. The new concept went beyond grammatical competence and included sociolinguistic, discourse and strategic competences. Sociolinguistic competence refers to appropriateness of utterances, discourse competence to cohesion and coherence of utterances and strategic competence refers to ways of compensating for inadequacies in grammatical and sociolinguistic competences. Several new conceptualisations have been made since Canale's, among them the most significant being Bachman's (1989), which introduced the notion of pragmatic competence.

A very important notion reflecting interaction of L1 and L2 proficiency was introduced by Cummins (1981) as the interdependency principle. Cummins claims that cognitive academic language proficiency (CALP) is common across languages and transferrable from L1 to L2. Ellis (1994) interprets the implication of interdependency as L1 proficiency benefiting the acquisition of L2.

Cummins' interdependency concept has lead to two questions that are being raised in an increasing number of studies:

> *How L1 literate does the L2 user have to be to make*
> *the L2 knowledge work?*
> *How much L2 knowledge does the L2 user*
> *have to have in order to make the L1 literacy*
> *knowledge work?*

In the present study we will be referring to the notion of communicative language competence as operationalised in *Common European Framework of Reference* (*CEFR*, 2001: 108-130). In this context communicative language competences includes the following components: linguistic competences, sociolinguistic competences and pragmatic competences. Linguistic competence comprises lexical, grammatical, semantic, phonological,

orthographic and orthoepic competences. Sociolinguistic competence within the framework of *CEFR* is concerned with the matters reflecting the following dimensions of language use: markers of social relations, politeness conventions, expressions of folk-wisdom, register differences, dialect and accent. Pragmatic competences include discourse, functional and design competence and reflect the language user's knowledge about the organisation, communicative function and interactional and transactional schemata of messages. Each of the listed competences is scaled in terms of the six CEFR levels (see Figure 1), where A1 and A2 levels denote basic users, B1 and B2 proficient users and C1 and C2 independent users.

C2	PROFICIENT USER
C1	
B2	INDEPENDENT USER
B1	
A2	BASIC USER
A1	

Figure 1: The six CEFR levels and the corresponding users

The common reference points for the six levels are described in different ways depending on the purpose they are intended for. Since our study focused on learners who were supposed to have reached the A2 level, we present below the global representation for this level.

Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his\her background, immediate environment and matters in areas of immediate need. (CEFR, 2001: 24)

Figure 2: A2 level global descriptor

AIM OF THE STUDY

The aim of the present study, which was carried out as part of a large international project,[1] was to get an insight into the multi-competence of Croatian English as a Foreign Language (EFL) learners. Following the significance of findings such as in Paradis and Genesee (1996) and Taeschner (1983), we assumed that different aspects of L1 and L2 competence may be related within the L2 learner's multi-competence. In this study we tried to explore Croatian EFL learners' multi-competence by examining the relationships between learners' performances in different skills within the same language (L1 or L2) and those between the same skill in two languages. The predictive value of L1 scores for scores on L2 tests was looked into as well.

SAMPLE

Approximately 400 year 8 Croatian EFL learners (aged 13-14 years) were drawn from 10 different schools representing small village, small town and big town settings. A total of 21 groups (i.e. classes) of learners

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were included. The age at which they had started their EFL study ranged from 3 to 10 years. At the time of testing English was for all of them a compulsory school subject.

INSTRUMENTS

The design of the study included parallel investigations of competence in listening, reading and writing skills in participants' L1 (Croatian) and L2 (English). This allowed us to look into the relationships between the skills and the languages involved. A speaking test in L2 was added in order to get a deeper insight into participants' L2 competence.

EFL measures

These consisted of two test booklets comprising paper and pencil tests of listening, reading and writing, and a speaking test. The tests in the two booklets had been designed and validated first in Hungary in 2002 and later in Croatia, where they were used on a large sample within a national research project.[2] The speaking test was adapted from a validated speaking test for Hungarian EFL learners. The tests were meaning-focused and based on the CEFR levels the EFL learners were expected to have reached: A1 and lower band of A2 level.

The reading test consisted of five tasks, which involved matching words with appropriate definitions, notices with meaning, questions with answers, and matching adverts with missing words. In terms of types of texts there were entries from dictionaries, public notices, an interview from a youth magazine, quiz texts and ads. There were two listening texts (scripted conversations) and the listening comprehension tasks involved multiple choice items on a picture and a text. In the writing test participants had to describe ten differences in two pictures by writing 20 simple or 10 complex sentences.

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[2] The project's title is *English in Croatia* and it is sponsored by the Croatian Ministry of Science, Education and Sport.

The speaking test included three tasks. In the first the interlocutor asked participants six general questions (name, age, about family, hobbies etc.). The second task involved picture description, while in the third task participants acted out with the interlocutor two chosen situations (out of six on offer), in two of which they were supposed to initiate simple conversations similar to dialogues in coursebooks.

L1 measures

L1 booklets tested listening comprehension, reading comprehension and writing. These were new tests designed and piloted on a similar population in Hungary, and validated in Croatia specifically for the purpose of this project.

The listening tests included recordings of authentic national radio programs expected to be intrinsically motivating for 14-year-olds. The tests tapped both close listening and skimming.

The five-part reading test comprised popular science texts, tables, and news from daily papers, texts from encyclopedias and literary texts. The reading subskills tapped were skimming, scanning and intensive reading.

The writing tests involved two tasks. Writing Task 1 elicited participants' opinion on allowing learners to draw graffiti on their local school wall. In Writing Task 2 participants had to write a letter to a travel agent concerning a place where the participant and three friends could stay during holidays.

PROCEDURE

The tests were administered to participants during their regular classes. While paper and pencil tests were administered to whole groups, the L2 speaking test was done only by six learners from each group. These learners were chosen randomly.

Assessment of tests involved three types of procedures. Some tasks (e.g. multiple choice items) were simple to score and assess, some required

negotiation (short answers) and some involved the construction of assessment tools and sophisticated training (writing and speaking tasks).

For the writing tasks (one in English and two in Croatian) three separate assessment scales were constructed along four criteria: task achievement, vocabulary, grammar/accuracy and text cohesion, with scales of four bands each.

Assessment of speaking performance was done by means of a specially designed assessment scale constructed along the following criteria: task achievement, vocabulary, accuracy and fluency, pronunciation and intonation, with a scale including five bands each.

The assessors of both writing and speaking were trained. Since such training has to focus on the actual tasks, four sets of training were conducted. Length of the training depended on how much time the assessors needed to standardize their criteria (between three to five hours).

RESULTS AND DISCUSSION

The collected data was statistically analysed for frequencies (Table 1 & Figure 3) and correlations (Table 2).

Table 1: Summary statistics for students' L1 and L2 performance

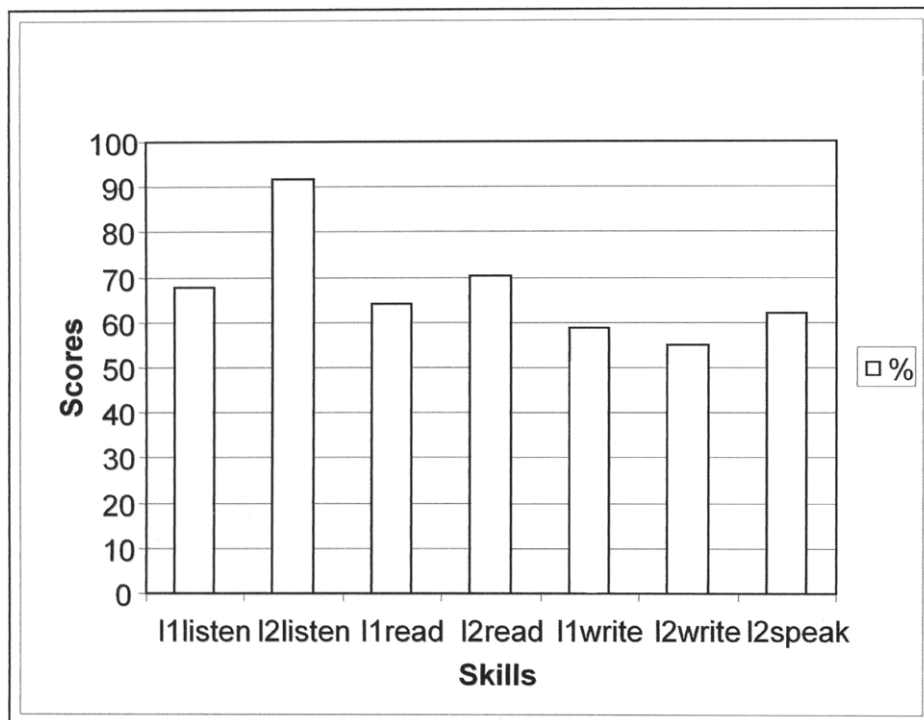|	N	MEAN	*SD*	PERCENTAGE
L1LISTENING	273	10.18	2.85	67.86
L2LISTENING	416	18.38	2.86	91.90
L1READING	373	19.90	5.90	64.19
L2READING	353	32.34	9.84	70.30
L1WRITING	177	37.52	17.30	58.62

Figure 3: Scores on tests in percentages

A comparison of the obtained scores on the tests shows that our participants were not equally successful on all tests. In both languages they scored highest on listening tests and lowest on writing. In L2 the scores on the speaking test were the lowest of the four skills. We can conclude that our participants performed better at the receptive than at the productive level. It might be interesting to note, though, that they were significantly better at L2 listening and L2 reading than their Hungarian counterparts in a comparative cross-country study that used the same EFL measures (Mihaljevic Djigunovic, Nikolov and Otto, in preparation).

Next, we computed correlation coefficients between the skills within the same language and then between the same skills in the two languages and between different skills in different languages.

All the measures, except L2 listening tests, had more or less normal distributions. The listening part was skewed to the left as it was easy.

Table 2: Correlations between skills

	L1 LISTEN	L1 READ	L1 WRITE	L2 LISTEN	L2 READ	L2 WRITE	L2 SPEAK
L1 LISTEN	1.000						
L1 READ	**.511****	1.000					
L1 WRITE	.297**	.460**	1.000				
L2 LISTEN	.371**	.413**	.255**	1.000			
L2 READ	.323**	**.575****	.268**	**.552****	1.000		
L2 WRITE	.168*	.363**	.257*	.328**	**.578****	1.000	
L2 SPEAK	.283*	.317*	-.299	.245*	**.661****	**.533****	1.000

** Correlation is significant at the .01 level
 * Correlation is significant at the .05 level

As can be seen from Table 2, all the coefficients except one are significant. However, only few coefficient values are large. The strongest relationship has been found between L1 and L2 reading, but the correlation coefficient is not very high, indicating a moderately strong relationship. Relationships between L1 and L2 listening comprehension and writing skills are less strongly related in our sample. If we compare coefficients between skills within the same language, results show that L2 skills are more strongly interrelated than skills in L1: a strong relationship characterizes L2 speaking and L2 reading and writing, and L2 reading and

L2 listening, whereas the least strong relationship was found, interestingly, between L2 speaking and L2 listening.

For a more in-depth analysis of results between skills and across languages we considered only coefficients above .30. All coefficients that were between .30 and .49 were taken as indicators of moderate relationships, while those that were .50 or above were considered as indicators of strong relationships. The graphic representation of these relationships is shown in Figure 4.
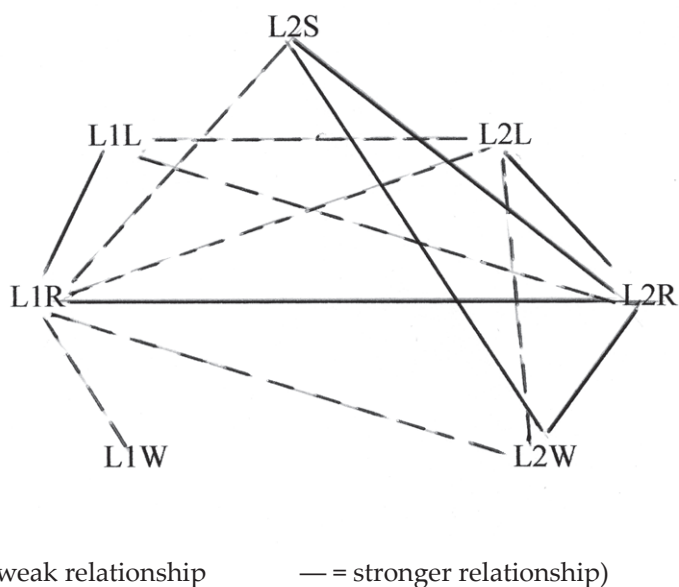

(---- = weak relationship — = stronger relationship)

Figure 4: Inter-relationships between L1 and L2 skills

As can be seen in Figure 4, L1 reading and L2 reading skills seem to be the most related to other skills. L1 reading is related to all the other skills both in L1 and L2, and two of these relationships (with L1 listening and L2 reading) can be considered strong. L2 reading is related to all skills except L1 writing skill, but out of the five significant correlations four (with L1 reading, L2 listening, L2 speaking, L2 writing) indicate strong relationships.

It is interesting to note that L1 reading is more strongly related to L1 listening (r= .511) than to L1 writing (r= .460). Another interesting finding is the relationship between L1 writing and L2 writing: the coefficient (r= .257) is statistically significant but low, indicating a weak relationship. The same is true for L2 speaking and L2 listening, where r= .245.

If we compare our findings to those of Eisterhold Carson et al. (1990) from a study on reading-writing relationships in L1 and L2, we can notice a similar trend: stronger relationships exist between reading comprehension across languages than between writing across languages, i.e. reading ability seems to transfer more easily than writing. In contrast to Edelsky (1982) and Canale, Frenette and Belanger (1988), however, we did not find evidence of interlingual transfer of writing skill.

Grabe (1991) suggests that the fluent reading process consists of six components: automatic recognition skills, vocabulary and structural knowledge, formal discourse structure knowledge, content background knowledge, synthesis and evaluation of strategies and metacognitive knowledge and skills monitoring. If we accept the view proposed by Larsen and Feder (1940: 251) that 'comprehension is largely a centrally-determined function operating independently of the mode of presentation of the material', then listening would comprise the same components. This would explain the strong relationship between listening and reading within each language, and evidence of a significant relationship between each skill across languages. Also, as Barton (1994) stresses, reading – or, for that matter, any language activity – takes place within a rich social world and may result in or be a result of other language skills and activities. These other activities probably reinforce reading as well as each other.

Buck (2001) stresses that listening and reading comprehension share many characteristics that are common to all forms of language comprehension. Research by Buck (1992), Bae and Bachman (1998), as well as by Freedle and Kostin (1999) provide evidence for this.

According to Cummins, transfer of skills can occur only in case learners have attained a threshold level of L2 proficiency to allow cognitively demanding language use. His view has been supported by Clarke (1978), Cziko (1978) and Alderson (1984). However, McLaughlin (1987) suggests that L2 threshold may not be a sufficient condition for transfer to occur.

L1 research studies (e.g. Belanger 1987, Stotsky 1983) have found significant correlations between reading and writing and have identified common cognitive processes and structural components that underlie both language skills.

One may assume that all the skills we focused on have certain common underlying elements that can operate in overall language use no matter whether we are using L1 or L2. The linguistic elements (e.g., parts of speech, syntactic structures etc.) learners use while performing in any of the four language skills are in fact the same. Thus, decoding linguistic elements during listening or reading may mean reinforcing them for the language learner to have them ready when the learner needs to use them productively in speaking and writing tasks. Some aspects of the knowledge of linguistic elements are shared by languages, especially those that are close; hence positive relationships between L1 and L2 skills. These relationships are probably the result of not only language knowledge but of the abilities implied by the same skill across languages. It is also reasonable to assume that all language skills share certain common subskills and abilities. Maybe a skillful language user conveniently transfers them from L1 to L2 and vice versa.

The role of language distance may be evident in the lack of significant relationship between L1 and L2 writing. With Croatian being an orthographically transparent language in contrast to English it is possible that at the A2 level the knowledge of spelling may still override the writing subskills that may be transferable from L1 to L2. It is also possible that it siply takes more practice in reading and writing to be able to do a productive task like the ones used in the study.

Predictability of L1 for L2 scores

Finally, we performed a multiple regression analysis to investigate the relationships between L1 listening, L1 reading, and L1 writing measures as the predictor variables and L2 total scores as the dependent variable. All the predictor variables were entered into the model simultaneously. The standardized beta coefficients for the predictor variables in the resulting model along with the corresponding t statistics are displayed in Table 3.

Table 3: Multiple regression analysis of students' L1 and L2 performance (N=64)

Multiple R	Adjusted R^2		β	t	P
0.590	0.315	L1LISTENING	-0.103	-0.950	.346
		L1READING	0.625	5.054	.000*
		L1WRITING	-0.033	-0.275	.784

* = Significant at the $p < .01$ level

L1 reading (β = 0.625) turned out to be the only significant predictor of L2 performance in the model. The total variance in L2 performance explained by students' L1 performance was, consequently, 32%.

Interestingly, the same analysis performed on Hungarian counterparts' scores produced different results: all the variables in the regression equation significantly contributed to the prediction of learners' English test scores with L1 listening being the best predictor (β = 0.408), followed by L1 writing (β = 0.284) and L1 reading (β = 0.194) (Mihaljevic Djigunovic, Nikolov and Otto, in preparation).

Thus, interactions of L1 and L2 competences may be assumed to be different in different contexts of learning and with different L1.

CONCLUSION

The results of the study described above show that Croatian EFL learners' communicative language competences (as evidenced by their performance on listening, reading, speaking and writing communicative tests) in L1 and L2 are interrelated and may, indeed, be part of one construct – a multi-competence. Our findings suggest that at the A2 level of competence in EFL, Croatian learners' performances indicate evidence of both interlingual and intralingual interaction of skills. The strongest interlingual interaction is indicated for reading. As far as intralingual interaction is concerned, while in L1 the interaction is strongest between

reading and listening, in L2 it is reading and writing that show an even stronger relationship. It is interesting to note that the strongest intralingual relationship for L2 is, in fact, between reading and speaking, a rather unusual finding. Since we did not include measures of L1 speaking in this study we do not know whether the same strongest transfer would have been evidenced in L1 as well.

Our investigations have provided us with more questions than answers. We believe these questions should be taken up in future research because they may throw more light on the structure of EFL learners' multi-competence as well as on the L2 learning process, perhaps even at the L1 learning process, and help design more efficient approaches to foreign language teaching.

LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FURTHER RE-SEARCH

Due to technical reasons, our study did not include a measure of L1 speaking. Findings on all the four language skills in all the languages studied could certainly render a more complete picture in a future study. Future attempts at defining L2 user competence in terms of the user's multi-competence could be done on samples that are at higher and lower proficiency levels in EFL than the present sample. It is reasonable to assume that the interaction between L1 and L2 competences might display different patterns at different proficiency levels. The same might be true about different ages of L2 users. Another interesting angle of looking into this phenomenon would be from the gender perspective: it might be possible that interactions are different in female and male L2 users. How generalizable the interactions at any proficiency or age level are for the two genders might be shown by studies that would consider users of different L1 and L2 combinations.

REFERENCES:

Alderson, Charles. 1984. Reading in a foreign language: a reading problem or a language problem?, *Reading in a foreign language* [ed. by Charles Alderson and A. H. Urquhart], New York: Longman, pp. 1-27.

Bachman, Lyle. 1989. Language testing-SLA research interfaces, *Annual Review of Applied Linguistics, Volume 9* [ed. by Robert Kaplan], Cambridge University Press, pp. 193-209.

Bae, Jungok and Bachman, Lyle. 1998. A latent variable approach to listening and reading: Testing factorial invariance across two groups of children in the Korean/English two-way immersion program, *Language Testing* 15(3), pp. 380-414.

Barton, David. 1994. *Sustaining local literacies*, Clevedon: Multilingual Matters.

Belanger, J. 1987. Theory and research into reading and writing connections: A critical review, *Reading-Canada-Lecture* 5(1), pp. 10-18.

Buck, Gary. 1992. Listening comprehension: construct validity and trait characteristics, *Language Learning* 42(3), pp. 313-357.

Buck, Gary. 2001. *Assessing Listening*, Cambridge, UK: Cambridge University Press.

Canale, Michael. 1983. From communicative competence to language pedagogy, *Language and communication* [ed. by Jack Richards and Richard Schmidt], New York: Longman, pp. 2-27.

Canale, Michael., Frenette, N., and Belanger, J. 1988. Evaluation of minority student writing in first and second language, *Second language discourse: A textbook of current research* [ed. by J. Fine], Norwood, NJ: Ablex, pp. 147-165.

Clarke, M. 1978. Reading in Spanish and English: Evidence from adult ESL students, *Language Learning* 29(1), pp. 121-150.

Cook, Vivian. 1991. The poverty-of-the-stimulus argument and multi-competence. *Second Language Research* 7 (2), 103-117.

Cook, Vivian. 2002. Background to the L2 User, *Portraits of the L2 User* [ed. by Vivian Cook], Clevedon: Multilingual Matters, pp. 1-28.

Cook, Vivian. (ed.) 2003. *Effects of the Second Language on the First*, Clevedon: Multilingual Matters.

Council of Europe. 2001. *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*, Cambridge: Cambridge University Press.

Cummins, Jim. 1988. Second language acquisition within bilingual education programs, *Issues in Second Language Acquisition: Multiple Perspectives*. [ed. by Leslie Beebe], New York: Newbury House.

Cziko, Gary. 1978. Differences in first and second language reading: The use of syntactic, semantic and discourse constraints, *Canadian Modern Language Review* 34, pp. 473-489.

Edelsky, Carole. 1982. Writing in a bilingual program: The relation of L1 and L2 texts, *TESOL Quarterly* 16(2), pp. 211-228.

Eisterhold Carson, Joan., Carrell, Patricia L., Silberstein, Sandra., Kroll, Barbara. and Phyllis, A. 1990. Reading-Writing Relationships in First and Second Language, *TESOL Quarterly* 24(2), pp. 245-266.

Ellis, Rod. 1994. *The Study of Second Language Acquisition*, Oxford: Oxford University Press.

Freedle, Roy. and Kostin, Irene. 1999. Does text matter in a multiple-choice test of comprehension? The case of construct validity of TOEFL's mini-talks, *Language Testing* 16(1), pp. 2-32.

Fries, Charles. 1945. *Teaching and Learning English as a Foreign Language*, Ann Arbor: The University of Michigan Press.

Grabe, William. 1991. Current developments in second language reading research, *TESOL Quarterly* 25(3), pp. 375-406.

Lado, Robert. 1964. *Language Teaching: A Scientific Approach*, New York: McGraw Hill.

Larsen, Robert. and Feder, D.D. 1940. Common and Differential Factors in Reading and Hearing Comprehension, *Journal of. Educational Psychology* 31, pp. 241-252.

McLaughlin, Barry. 1987. Reading in a second language: Studies with adult and child learners, *Becoming literate in English as a second language* [ed. by S. R. Goldman and H. T. Trueba], Norwood, NJ: Ablex, pp. 57-70.

Mihaljevic Djigunovic, Jelena., Nikolov, Marianne., and Otto, Istvan (in preparation) A comparative study of Croatian and Hungarian year 8 students' performances in their first languages and in English as a foreign language

Paradis, Johanne. and Genesee, Fred. 1996. Syntactic acquisition in bilingual children. *Studies in Second Language Acquisition* 18, pp. 1-25.

Stotsky, Sandra. 1983. Researching on reading/writing relationships: A synthesis and suggested directions, *Language Arts* 60, 627-642.

Taeschner, Traute. (1983) *The Sun is Feminine*, Berlin: Springer.

INTERAKCIJA KOMUNIKACIJSKE JEZIČNE KOMPETENCIJE U PRVOME I DRUGOME JEZIKU

U članku se opisuje istraživanje kojeg je cilj bio ispitati interakciju komunikacijske jezične kompentencije u prvome i drugome jeziku. Autorica je izmjerila performansu u materinskome i engleskome jeziku hrvatskih učenika osmoga razreda osnovne škole pomoću komunikacijski orijentiranih testova. Testovi su bili jednako koncipirani i za mjerenje kompetencije u materinskome i u stranome jeziku. Uzorak je uključio gotovo 400 ispitanika. Rezultati na testovima za materinski jezik uspoređeni su s rezultatima testova za engleski jezik. Nalazi su analizirani na nekoliko razina.

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