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THE PRODUCTION ACCURACY OF ENGLISH DENTAL FRICATIVES IN SERBIAN PRIMARY SCHOOL ESL STUDENTS

The English dental fricatives [θ] and [ð] are assumed to present a challenge for acquisition by Serbian L1 speakers because they are not present in the inventory of Serbian phonemes. The primary aim of our research, therefore, was to study whether and how the position of the [θ] and [ð] sounds in a word (initial, medial or final) affects the accuracy of their pronunciation, both in the individual word and textual context. We also studied which sounds were used as substitutions for [θ] and [ð] in the cases of inaccurate pronunciation. Moreover, we performed a comparative analysis between two age groups of primary school ESL students in order to evaluate the possible impact of training and language exposure on the production of English dental fricatives. The obtained results show that the participants in our study most accurately pronounce the [θ] and [ð] sounds when they are placed in the final word position, with the voiceless dental fricative [θ] being pronounced more accurately than its voiced counterpart [ð]. The participants in our study substituted the English dental fricatives [θ] and [ð] with the Serbian stops [t̪] and [d̪] in an overwhelming number of cases, arguably due to the Universal Grammar constraints. Finally, the 8th-grade students showed greater accuracy in the pronunciation of the [θ] and [ð] sounds in comparison to the 5th-grade ones, which suggests that training and language exposure possibly have a positive effect on the production accuracy of the aforementioned sounds.

Keywords: ESL, primary school**,** pronunciation, dental fricatives, interlanguage

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1. Introduction

Ever since Saussure's (1959)[1] ground-breaking work, it has been assumed that every word represents a rather arbitrary mapping between form and meaning (however, for opposing views, see Maurer, Pathman and Mondloch 2006; Ković, Plunkett and Westermann 2010). It has been argued that in the mental lexicon, each word possesses two distinct but interacting representational forms, i.e., the orthographic and phonological forms (Baxter et al., 2021). Therefore, in order to acquire a new L2 word, we can assume that a learner must build a new form, i.e., new phonological and orthographic representations in their mental lexicons (Abutalebi 2008; Tagarelli et al. 2019; Yang et al. 2015). There are a number of theories that strive to explain how L2 learners acquire L2 phonology, i.e., build new phonological forms (e.g., *the critical period hypothesis* (Walsh 1981), *the contrastive analysis hypothesis* (Wardhaugh 1970), *the interlanguage hypothesis* (Selinker 1972), i.a.), as well as which factors influence and constrain this process (L1, age, training, ability, motivation, etc.). This is especially important and interesting when L2 contains sounds that do not exist in the learner's L1, both from the theoretical and practical (language teaching and learning) perspective.

English dental fricatives [θ] and [ð] represent a particular case since not many world languages contain these phonemes in their inventory. What usually happens when learners learn English as an L2 is that they substitute those sounds with either stops [t] and [d] or fricatives, such as [s] and [z] (Lombardi 2003). Furthermore, the fricative [f] is also attested as a substitutive sound for both [θ] and [ð] in Slavic languages (Metruk 2016; Wetzels and Mascaró 2001).

From a theoretical perspective, the question is which rules and constraints govern these substitutions in speakers of a particular L1. On the other hand, from a teaching perspective, the issue is which sounds the students will have most trouble with in the process of the acquisition of L2 phonology, as well as how the students should be trained in order to attain the accurate pronunciation of the target sounds.

There are two most prominent modes of explaining L2 substitutions in the literature – Universal Grammar (UG) (Chomsky 1995) and transfer (Selinker 1969). Lombardi (2003) argues that if English dental fricatives [θ] and [ð] are substituted by stops [t] and [d], this is due to the universal markedness relationship since stops are less marked than fricatives in the manner and hence are acqu-

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[1]   The original *Cours de linguistique générale* was compiled and published after Saussure's death by two of his students Charles Bally and Albert Sechehaye in 1916. However, here we refer to the English translation of this work from 1959.

ired earlier than fricatives. This substitution is thus regulated by UG, showing a universal effect. However, speakers of languages that substitute English dental fricatives with L1 fricatives, such as [s] and [z], show a transfer effect, i.e., something in their L1 phonology constrains this more marked substitution choice when compared to the plosives.

On the other hand, there are factors which may influence, i.e., facilitate or hinder, the accurate pronunciation of the target sounds, in the present case – the English interdental fricatives [θ] and [ð]. According to Rau, Chang and Tarone (2009), these factors include immediate phonetic environment and speech style. Savić and Jerotijević (2011), on the other hand, report that speech style did not have a significant effect on the Serbian L1 participants in their study. However, what they show is that certain internal factors significantly influence the accurate pronunciation of [θ] in Serbian speakers. Namely, they suggest that high front vowels (e.g., /i/ and /e/) and closing diphthongs, when preceding [θ], facilitate the accurate pronunciation because they are closer to the place of the articulation of [θ], i.e., the dental position. On the other hand, the consonant [ɹ] preceding a coda [θ] inhibits its accurate pronunciation.

The aim of this paper is to research the accuracy of the pronunciation of the English dental fricatives [θ] and [ð] in Serbian primary school ESL students in regard to the word position they occur in and their age (i.e., duration of language exposure). The research questions are the following:

(1) In which word position(s) (initial, medial or final) are the English dental fricatives [θ] and [ð] pronounced most accurately?

(2) Which sounds are used as substitutions for the English dental fricatives in the cases of inaccurate pronunciation?

(3) Do the older primary school students (the 8th-grade ones) pronounce the target sound more accurately than the younger ones (the 5th-grade students)?

2. Methods and Materials

2.1. Participants

The participants in this study were ten 5th-grade students (6 females and 4 males) and ten 8th-grade students (9 females and 1 male) of ESL from a primary school in Serbia. All the students were elected for the participation in this study by their respective teachers on the basis of their grades and overall knowledge of English. The requirements were that the students have grade 5 (the highest grade) in English and that they have a generally excellent command of English at their respective levels. The researcher obtained parental permission for all the

participants prior to the beginning of the study, i.e., all the participants' parents signed the informed consent. The participants were interviewed in May and June of 2023.

2.2. Methods

The participants were presented with a PowerPoint presentation on a laptop in a quiet room. Only the researcher and the participant were present during the experiment. The testing sessions lasted about 5–10 minutes per participant. The participants' answers were audio-recorded for later analysis.

2.3. Materials

The testing material was divided into two parts – individual words and a short text. In the first part, on each slide, there was a word that the participants were asked to read aloud. It was a self-paced task with 24 words in total; 12 of them were test items (6 containing the sound /θ/ and 6 containing the sound /ð/), and 12 of them acted as distractors (see Appendix 1, but also the *Study Limitations* section). The items were randomized.

Subsequently, in the other part, there was a short text that the participants were asked to read aloud. In the text, there were 6 test items, 3 containing the sound /θ/ (in the initial, medial and word-final positions) and 3 containing the sound /ð/ (in the initial, medial and final word positions) (see Appendix 1).

2.4. Results Analysis

The audio recordings were listened to and analysed by two experienced teachers who completed questionnaires in which they noted whether the participants had achieved the correct pronunciation of the English dental fricatives and in the case of substitutions they noted the sounds which the participants had used. Therefore, the method of the analysis of the results in the present study is perceptual, i.e., subjective evaluation.

3. Results and Discussion
3.1. The 5th Grade Students' Results
3.1.1. Individual Words

The percentage of accurate pronunciation of the target English dental fricatives is represented in Table 1. The participants pronounced the dental fricative /θ/ with varying success. The accuracy of the target pronunciation of the fricative /θ/ was the highest in the medial position, although still below 50%, while it was pro-

nounced slightly less successfully when it was in the final word position (35%). However, the students rarely attained the desired pronunciation of /θ/ when it was in the initial word position (only in 10% of the cases).

As for the voiced dental consonant /ð/, the students neither accurately produced it in the initial nor in the medial position. However, in the final position, the students attained the target pronunciation in 5% of cases.

Table 1. The Percentage of Accurate Pronunciations of /θ/ and /ð/ in Individual Words by the 5th-Grade Students

/θ/		/ð/	
initial	10%	initial	0%
medial	40%	medial	0%
final	35%	final	5%

3.1.2. Text

When reading the short text containing the target items, the students achieved slightly different results compared to the reading of the individual words when it came to the accuracy of the pronunciation of the English dental fricatives in different word positions. Namely, concerning the fricative /θ/, in this context, the students achieved the best accuracy when it was in the initial position, while it was pronounced least accurately in the medial position. However, there was not a single case of an accurate pronunciation of the sound /ð/.

Table 2. The Percentage of Accurate Pronunciations of /θ/ and /ð/ in the Text by the 5th-Grade Students

/θ/		/ð/	
initial	40%	initial	0%
medial	10%	medial	0%
final	30%	final	0%

3.1.3. Substitutions

Analysing the instances of inaccurate pronunciation of the sounds /θ/ and /ð/, we can observe that in the initial position, the sound /θ/ was substituted by the voiceless stop /t/ in all the cases. In the medial word position, it was also substituted by the voiceless stop /t/ in 67% of the cases, while it was substituted by the voiced stop /d/ in 33% of the cases. When it comes to the final position, the sound /θ/ was

substituted by /t/ in 93% of the cases, while there was one instance of substitution by the Serbian fricative /f/.

As for the sound /ð/, in both initial and medial positions, it was substituted by the voiced stop /d/ in all the cases, while in the final position, it was substituted by the fricative /θ/ in the majority of cases (64%), followed by /t/ in 29% and /d/ in 7% of the cases.

Table 3. Sound Substitutions of /θ/ and /ð/ Employed by the 5th-Grade Students

	/θ/		/ð/	
Position	Substitution:	Percentage:	Substitution:	Percentage:
Initial:	/t/	100%	/d/	100%
Medial:	/t/	67%	/d/	100%
	/d/	33%		
Final:	/t/	93%	/θ/	64%
	/f/	7%	/t/	29%
			/d/	7%

3.2. The 8th Grade Students' Results

3.2.1. Individual Words

The 8th-grade students showed a greater level of mastery when compared to the 5th-grade students. However, just as in the case of the 5th-grade students, the sound /θ/ received a greater overall percentage of accurate pronunciation than the sound /ð/.

The voiceless dental fricative /θ/ was most accurately pronounced in the final position (60%), while it was least accurately pronounced in the initial position (only 25%). If we compare these results with the 5th-grade students' results, we can observe that both 5th-grade and 8th-grade students scored the lowest percentage when /θ/ was in the initial word position; nevertheless, the 8th-graders had a 15% better score (25%) when compared to the 5th graders (10%). Based on the data presented in Table 4, we can say that the 8th graders were virtually equally successful in the target pronunciation of /θ/ in both medial and final positions. In the medial and final positions, we can also observe that the 8th graders scored a greater percentage of the accurate pronunciation of the English dental voiceless fricative /θ/ than the 5th-grade students.

As for the sound /ð/, in contrast to the 5th-grade students, the 8th-grade students achieved a certain number of accurate responses in all three conditions. They

were least accurate with the sound /ð/ in the initial position, while they were slightly better when the target sound was in the medial or final position.

Table 4. The Percentage of Accurate Pronunciations of /θ/ and /ð/ in Individual Words by the 8th-Grade Students

/θ/		/ð/	
Initial	25%	Initial	10%
Medial	55%	Medial	20%
Final	60%	Final	20%

3.2.2. Text

When reading the text, the 8th graders were most accurate in the target pronunciation of /θ/ when it was in the final position, while when it was in the initial and medial positions, the students were less accurate, scoring 40% correct responses. Interestingly, both 5th and 8th graders scored an equal percentage of accurate pronunciation of /θ/ in the initial position, whereas in the other two conditions, the 8th graders were by far more successful in attaining the target pronunciation.

When it comes to the accuracy of the pronunciation of the sound /ð/, the 8th-grade students were as equally successful in its accurate pronunciation as in the individual word context.

Table 5. The Percentage of Accurate Pronunciations of /θ/ and /ð/ in the Text by the 8th-Grade Students

/θ/		/ð/	
initial	40%	initial	10%
medial	40%	medial	10%
final	80%	final	20%

3.2.3. Substitutions

Analysing the instances of inaccurate pronunciation of the sounds /θ/ and /ð/, we can observe that in the initial and final positions, the English fricative /θ/ was in all the cases substituted by the stop /t/. In the medial position, it was substituted either by the voiceless stop /t/ or its voiced counterpart /d/.

When it comes to the sound /ð/, we can observe that in the initial and medial positions, it was substituted by the voiced stop /d/, while in the final position, in the majority of cases, it was substituted by its voiceless counterpart /θ/.

Table 6. Sound Substitutions of /θ/ and /ð/ Employed by the 8th-Grade Students

	/θ/		/ð/	
Position	Substitution:	Percentage:	Substitution:	Percentage:
Initial:	/t/	100%	/d/	100%
Medial:	/t/	56%	/d/	100%
	/d/	44%		
Final:	/t/	100%	/θ/	64%
			/t/	29%
			/d/	7%

3.3 The Effect of Training and Language Exposure on Pronunciation Accuracy

Performing the comparative analysis between scores of the 5th and 8th-grade students (see Table 7), we can see that in the case of the pronunciation of individual words, the 8th-grade students were more accurate in all the conditions. The difference is most prominent in the final word position in the case of the sound /θ/ and all the conditions in the case of the sound /ð/.

Thus, it can be hypothesized that the training and the duration of language exposure possibly have a positive effect on the acquisition and accurate pronunciation of English dental fricatives. However, in order to test this hypothesis, a longitudinal study which would follow the same group of students from the 5th through the 8th grade should be performed. In this way, their relative progress could be observed and properly evaluated.

Table 7. Comparative Overview of the Percentages of Accurate Pronunciations of /θ/ and /ð/ in Individual Words and the Text between 5th and 8th-Grade Students

	INDIVIDUAL WORDS				TEXT			
	/θ/		/ð/		/θ/		/ð/	
Position:	5th grade	8th grade	5th grade	8th grade	5th grade	8th grade	5th grade	8th grade
Initial	10%	25%	0%	10%	40%	40%	0%	10%
Medial	40%	55%	0%	20%	10%	40%	0%	10%
Final	35%	60%	5%	20%	30%	80%	0%	20%

3.4. Discussion

Concerning the accuracy of the production of English dental fricatives, first, we can observe that the voiceless dental fricative [θ] was pronounced with greater accuracy than its voiced counterpart [ð]. Secondly, both [θ] and [ð] were pronounced most accurately when they were in the final position in a word. Finally, in all the conditions, the 8th graders scored better results in terms of the accuracy of pronunciation, which suggests that training and length of exposure to the language possibly have a significant effect on the accuracy of pronunciation, which can be explained by the formation of new mental representations in speakers' brains over time (Baxter et al. 2021).

Throughout the study, we can also observe that the final position in a word seems to be the most salient one for the participants in our study since we recorded the greatest percentage of accurate instances of pronunciation of both [θ] and [ð] in this position. Furthermore, we would also like to highlight that in the final position, the voiced dental fricative [ð] was in both groups of participants substituted by its voiceless counterpart [θ], which was also noted in Gonet and Pietron's (2006) study with English learning Polish speakers.

The choice of [θ] as a substitution for [ð] cannot be explained by transfer since [θ] is neither a Polish nor a Serbian fricative. On the other hand, it suggests that what guides this choice is the speakers' interlanguage. It appears that the speakers in our study have successfully acquired the manner and the place of articulation, but, as it seems, the [+ voicing] feature has not yet been fully mastered. This finding aligns with Marković's (2020) observation that the acquisition of L2 sounds which exhibit complex contrasts can be better described as a process than an all-or-nothing scenario, displaying the developing nature of the acquisition of the L2 phonology.

However, the observed effect may also be the result of the natural process of devoicing of the voiced consonants at the end of a word due to the drop of the acoustic energy at the end of an intonational phrase (Wetzels and Mascaró 2001). Future studies which would control for this condition, i.e., intonational phrasing, would offer more data on the issue.

On the other hand, the initial position in the word seemed to be the most challenging one for the participants in terms of accurate pronunciation since the percentage of accurate instances of the pronunciation of the English dental fricatives was the lowest when they were in this position, relative to the medial and final word positions. This suggests that, for some reason, this word position is the least salient one for Serbian speakers. Further studies with greater samples are needed to corroborate the present findings and draw firmer conclusions.

When it comes to the types of substitutions, the participants in our study substituted the English dental fricatives [θ] and [ð] with the stops [t] and [d] in an overwhelming number of cases, which is expected and in line with previous research (Lombardi 2003; Jevremović 2016; Savić and Jerotijević 2011). Therefore, we can hypothesize that their choice was driven by UG in line with Lombardi (2003) and Sredović Trpeski (2013).

Finally, we would like to highlight a few educational implications which can be drawn from this study. Firstly, since we have observed that training and language exposure have a significant effect on the accuracy of pronunciation, we suggest that pronunciation should constitute an integral and specifically targeted part of any language course in primary schools. Specifically, we suggest that a set of well-designed and age-appropriate phonetic and phonological exercises should be implemented into ESL classes and that a certain portion of each class should be dedicated to mastering the correct pronunciation of foreign language sounds (Penningaton and Richards 1986). Secondly, as we have detected that the initial word position seems to be the most challenging one for the Serbian speakers in our study when it comes to the accuracy of pronunciation of the English dental fricatives, it should be consciously brought to students' attention in language classes through certain phonetic exercises (Priya and Kumar 2020). In this way, the initial word position could become more salient and, therefore, easier for students to hear it properly. By properly hearing the sounds, the students should be able to make new mental representations of the target sounds in their mental lexicons, which in turn should enhance their level of accuracy in the pronunciation of the L2 sounds in the initial word position.

4. Conclusion

The present study shows that the English dental fricatives [θ] and [ð] are most accurately pronounced in the final word position by Serbian elementary school ESL learners. In the instances of inaccurate pronunciation of the [θ] and [ð] sounds, our participants mostly substituted them with the Serbian (L1) stops [t̪] and [d̪]. Overall, the 8th-grade students scored better results in terms of accurate pronunciation of the target sounds than the 5th-grade ones. On the one hand, the results suggest that, for some reason, the final word position seems to be the most salient one for Serbian speakers in terms of the correct pronunciation of the target English dental fricatives, while the initial word position seems to be the most challenging one. On the other hand, the better results of the 8th-grade students at least suggest that the duration of foreign language exposure possibly has

a positive effect on the accurate pronunciation of foreign language sounds. Future cohort studies should be able to corroborate or oppose the presented results.

Study Limitations

The present study has several shortcomings that could have influenced the results obtained. Firstly, the test items should have been more controlled in terms of the sounds preceding or following the test sounds [θ] and [ð] since certain sounds (e.g., /r/, /n/, /d/) may have influenced the precision of their pronunciation. Also, the natural devoicing of the consonants at the end of an intonational phrase due to the drop in the acoustic energy should have been taken into account both in the construction of the test items and the analysis of the accuracy of [ð] pronounced in the final word position. Furthermore, a precise statistical analysis would have determined whether the phonetic environment had a significant effect on the accuracy of the pronunciation of English dental fricatives in the presented study. These shortcomings should be remedied in a more comprehensive study of the issue in the future.

References

Abutalebi 2008: J. Abutalebi, Neural aspects of second language representation and language control. *Acta psychologica*, *128*(3), 466-478. https://doi.org/10.1016/j.actpsy.2008.03.014

Baxter et al. 2021: P. Baxter, H. Bekkering, T. Dijkstra, M. Droop, M. van den Hurk and F. Léoné, Grounding second language vocabulary instruction in cognitive science. *Mind, Brain, and Education*, *15*(1), 24–34. https://doi.org/10.1111/mbe.12278

Chomsky 1995: N. Chomsky, *The Minimalist Program*, Cambridge, Mass.: MIT Press. https://doi.org/10.7551/mitpress/9780262527347.001.0001

Gonet and Pietron 2006: W. Gonet, and G. Pietron, G. English interdental fricatives in the speech of Polish learners of English. *Dydaktyka fonetyki języka obcego. Neofilologia*, *8*, 73-86.

Jevremovic 2016: J. Jevremović, An Acoustic Phonetic Analysis of Different Realizations of [θ] in Serbian-Accented English, *Linguistic Portfolios, 5,* 66-77. https://repository.stcloudstate.edu/stcloud_ling/vol5/iss1/7

Ković, Plunkett and Westermann 2010: V. Ković, K. Plunkett and G. Westermann, The shape of words in the brain. *Cognition*, 114(1), 19–28. https://doi.org/10.1016/j.cognition.2009.08.016

Lombardi 2003: L. Lombardi, Second language data and constraints on Manner - explaining substitutions for the English interdentals. *Second Language Research*, 19 (3), 225-220. https://doi.org/10.1177/026765830301900304

Marković 2020: M. Marković, Phonetic Feature Interpretation in Second Language Phonology: The Acquisition of the Final Obstruent Voicing Contrast. *Belgrade English Language and Literature Studies*, 12(1), 27-49. https://doi.org/10.18485/bells.2020.12.2

Maurer, Pathman and Mondloch 2006: D. Maurer, T. Pathman and C. J. Mondloch, The shape of boubas: Sound–shape correspondences in toddlers and adults. *Developmental Science*, 9, 316–322. https://doi.org/10.1111/j.1467-7687.2006.00495.x

Metruk 2017: R. Metruk, Pronunciation of English dental fricatives by Slovak university EFL students. *International Journal of English Linguistics*, *7*(3), 11-16. https://doi.org/10.5539/ijel.v7n3p11

Pennigton and Richards 1986: M. C. Pennington and J. C. Richards, Pronunciation revisited. *TESOL quarterly* 20.2, 207–225. https://doi.org/10.2307/3586541

Priya and Kumar 2020: M. L. S. Priya and P. Kumar, Teaching phonetics to enhance pronunciation in an ESL classroom. *Journal of critical reviews*, 7(2), 669–672. https://doi.org/10.31838/jcr.07.02.121

Rau, Chang and Tarone 2009: D. V. Rau, H. H. A. Chang and E. E. Tarone, Think or sink: Chinese learners' acquisition of the English voiceless interdental fricative. *Language Learning*, 59(3), 581–621. https://doi.org/10.1111/j.1467-9922.2009.00518.x

Savić and Jerotijević 2011: J. D. Savić and D. Jerotijević, Factors Influencing Serbian EFL Learners' Production Accuracy of English Interdental Fricatives. In: I. Đ. Paunović, and M. Marković (eds.), *The First International Conference on English Studies English Language and Anglophone Literature Today (ELALT Proceedings)*. University of Novi Sad, Faculty of Philosophy, 63–70.

Saussure 1959: F. de Saussure, *Course in General Linguistics* (W. Baskin Trans.). New York: The Philosophical Library, Inc. (Original work published 1922).

Selinker 1969: L. Selinker, Language transfer. *General Linguistics*, 9, 67–92.

Selinker 1972: L. Selinker, Interlanguage. *IRAL* 10, 209–31.

Sredović Trpeski 2013: Г. Средовић Трпески, Усвајање енглеских денталних фрикатива /θ/ и /ð/ код млађих ученика енглеског језика као страног, *Наслеђе*, 10(26), 99–114. http://35.189.211.7/index.php/nasledje/article/view/573

Tagarelli et al. 2019: K. M. Tagarelli, K. F. Shattuck, P. E. Turkeltaub and M. T. Ullman, Language learning in the adult brain: A neuroanatomical meta-analysis of lexical and grammatical learning. *NeuroImage*, *193*,178-200. https://doi.org/10.1016/j.neuroimage.2019.02.061

Walsh and Diller 1979: T. M. Walsh and K. C. Diller, Neurolinguistic considerations on the optimum age for second language learning. In *Annual Meeting of the Berkeley Linguistics Society*, Vol. 5, 510–524. https://doi.org/10.3765/bls.v5i0.2157

Wardhaugh 1970: R. Wardhaugh, The contrastive analysis hypothesis. *TESOL quarterly*, 123-130. https://doi.org/10.2307/3586182

Wetzels and Mascaró 2001: L. MaWetzels and J. Mascaró, The typology of voicing and devoicing. *Language, 77(2),* 207–244. https://doi.org/10.1353/lan.2001.0123

Yang et al. 2015: J. Yang, K. M. Gates, P. Molenaar, and P. Li, Neural changes underlying successful second language word learning: An fMRI study. *Journal of Neurolinguistics*, *33*, 29–49. https://doi.org/10.1016/j.jneuroling.2014.09.004

Сања Р. Раковић

ПРЕЦИЗНОСТ У АРТИКУЛАЦИЈИ ЕНГЛЕСКИХ ДЕНТАЛНИХ ФРИКАТИВА КОД СРПСКИХ ОСНОВНОШКОЛАЦА

Сажетак

Усвајање енглеских денталних фрикатива [θ] и [ð] представља посебну потешкоћу за изворне говорнике српског језика због тога што они не постоје у инвентару фонема српског језика. Главни циљ нашег истраживања био је стога да се испита да ли и у којој мери позиција гласова [θ] и [ð] у речи (иницијална, средишња или финална) утиче на прецизност у њиховој артикулацији, како код изговора појединачних речи, тако и у контексту текста. Такође смо проучавали који се гласови користе као замена у случају непрецизне артикулације гласова [θ] и [ð]. Надаље, спровели смо компаративну анализу у погледу прецизности артикулације енглеских интердентаних фрикатива између две узрасне групе ученика основне школе како бисмо проценили могући утицај подучавања и изложености језику на прецизност њиховог изговарања. Прикупљени подаци показују да учесници у нашој студији најпрецизније изговарају [θ] и [ð] када се налазе у финалној позицији у речи, док се безвучни интердентални фрикатив [θ] изговара са већом прецизношћу од његовог звучног пара [ð]. Учесници у истраживању су најчешће замењивали енглеске интердентане фрикативе [θ] и [ð] српским плозивима [t̪] и [d̪], што се може сматрати последицом принципа универзалне граматике. Коначно, ученици осмог разреда су показали већу прецизност код артикулације гласова [θ] и [ð] у поређењу са ученицима петог разреда, што сугерише да подучавање и изложеност језику могу имати позитиван утицај на прецизност артикулације гласова страног језика.

Кључне речи: настава енглеског језика, основна школа, изговор, дентални фрикативи, интерјезик

Appendix 1

(I) Test items

/θ/		
Initial position:	**Medial position:**	**Final position:**
Thousand	nothing	month
Three	birthday	tooth

/ ð/		
Initial position:	**Medial position:**	**Final position:**
This	mother	bathe (v.)
They	weather	breathe (v.)

(II) Distractors

chin, church, dish, dolphin, elephant, goldfish, much, phone, photograph, shell, shower, touch

(III) Text

On my birthday, my mother always makes a large cake. I have a sweet tooth, and I like cakes very much. Last year, she made three cakes. They were delicious. I ate so much, I couldn't breathe.