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A NOVEL APPROACH TO TEACHING THE IPA CHART AND PHONEMIC TRANSCRIPTION: INSIGHTS AND IMPLICATIONS

This paper aims at comparing two different approaches to teaching the fundamentals of broad phonemic transcription - the old-fashioned, teacher-centred method involving repetition and drill exercises, and a more recent, relatively under-researched, learner-oriented method proposed by Adrian Underhill (2005). The idea behind the latter is to make pronunciation, hence the IPA symbols, empirical and physical, i.e. visible or, better yet, touchable. To determine whether the aforementioned teaching approaches are dissimilar in terms of effectiveness, we conducted an empirical study with two groups of Serbian EFL learners. One group was subjected to traditional teaching practices whereas the other was exposed to Underhill's phonemic training program. Furthermore, we distributed a questionnaire to both groups of participants to gain an insight into the learners' attitudes toward the applied methods. The data indicate that the Underhill method has contributed to improved results with regard to learning success and memory enhancement. Taking into consideration the universal application of the IPA symbols, the paper underscores the relevance of this innovative method for teaching phonemic transcription, not only of English, but any other world language.

Key words: phonemic transcription, IPA, teaching methods, Adrian Underhill, EFL

0. Introduction

The interlanguage phonology research abounds in papers debating whether emphasis should be placed on segmental or suprasegmental aspects in pronunciation teaching (DERWING & MUNRO 1997), and whether achieving native-like pronunciation is possible (KANG et al. 2010, MOYER 2004), or even necessary (BURNS & CLAIRE 2003).

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Research directed at phonemic transcription teaching is, on the other hand, rather scarce. Moreover, even though there is an extensive body of research dealing with second language phonology acquisition, the studies that relate the findings of these investigations to the actual classroom instruction are limited in the sense that they lack practical application of theoretical conclusions (LEVIS 1999).

Beginning in the late 1960s and continuing through the 1970s and 1980s, an increased interest in communicative aspects of second language acquisition (SLA) made the notion of intelligibility prevail over general pronunciation accuracy. However, a growing number of studies proved, over the years, the importance of the development of pronunciation skills given that their lack might result in self-confidence issues, interaction breakdowns, professional discrimination and stereotyping (MORLEY 1991). Hence, scholars suggested that teachers should become effective coaches of pronunciation, incorporating all the necessary audio-visual materials in order to make the learners' pronunciation understandable (FRASER 2000). With the predominance of communicative approaches in EFL classrooms around the world, pronunciation practice started to be viewed as an activity separate from the wholesome language instruction (HINKEL 2006). At the same time, certain studies demonstrated that students benefited more from explicit pronunciation instruction and practice (LORD 2005). Even so, the widespread communicative orientation often diverges from the notion of explicit teaching practices which has led to pronunciation being designated as an 'orphan' of SLA research and practice (GILBERT 2010). And when it comes to effective instructional practices, the most frequently used 'minimal pair' drills have repeatedly been called into question, even scorned upon and dismissed as exercises which present meaningless language practice (cf. BROWN 1995).

The factor that further promotes confusion regarding the choice of the proper pronunciation teaching approach is the spread of English as a *lingua franca*. Given that non-native speakers of English have outnumbered native speakers to once unimaginable proportions (cf. CRYSTAL 1997), an ongoing controversy remains among teachers and scholars alike as to which variety of English should be taught in the ESL and EFL classrooms.

All the queries that have emerged can probably be linked to divergent views on pronunciation instruction prompted by various schools

of language teaching which came into fashion over the course of time. Teaching approaches based on behaviourist theories, for instance, including the Audiolingual Method, focused on achieving native-like pronunciation. Accordingly, pronunciation instruction stressed repetitive practice, including both perception and production tasks (RUSSELL 2009). The Natural Approach, inspired by Stephen Krashen's celebrated hypotheses, was based on entirely different postulates, particularly the ones related to the possibility of achieving native-like articulation of target segmentals and suprasegmentals (TERRELL 1977). It underscored communicative competence, rendering error correction minimal because it was regarded as detrimental to successful SLA. Consequently, grammatical and pronunciation problems were, for the most part, overlooked in everyday teaching practices. The notion of pronunciation being the most demanding aspect of L2 proficiency to be enhanced and perfected took root and exerted influence well into the era of Communicative Language Teaching, with intelligibility seen as the primary goal of SLA, accuracy disregarded and explicit pronunciation instruction marginalized. The tide began to turn, though, when numerous studies revealed that pronunciation constitutes an integral part of target language proficiency (O'BRIEN 2004, SEFEROGLU 2005, WALKER 2010).

1. Phonemic transcription and its role in the EFL classroom

The International Phonetic Association, founded in Paris in 1886 (originally called The Phonetic Teachers' Association), supported the creation of the International Phonetic Alphabet (i.e. IPA) - a carefully designed set of symbols that represent the sounds of human languages (KEMP 1994). The IPA was based on Henry Sweet's Romic alphabet which in turn was derived from Isaac Pitman and Alexander John Ellis's Phonotypic Alphabet. Today's version of IPA is the product of many alterations introduced throughout the years. It serves as a practical tool for presenting the sheer sounds of languages and is widely used by phoneticians all over the world.

Transcription is conventionally divided into *broad* and *narrow*. The former is typically employed in monolingual dictionaries in which only phonemes are transcribed (e.g. *pill* /pɪl/) while the latter provides more details relating to sounds including their allophonic variations (e.g. *pill* [p^hɪl]).

English is notorious for its spelling conventions due to numerous exceptions, ambiguous pronunciation and the existence of homophones,

as well as a lack of strictly abiding rules. All of these can render the process of learning English as a foreign language intimidating to prospective learners. Especially if the native language spelling conventions are in line with the so-called phonetic alphabet, i.e. the writing system in which a sound is represented by a single corresponding letter, as is the case with Serbian. As a result, learners frequently resort to writing the pronunciation of L2 lexical items by relying on the spelling conventions of their native language. This can have an undesired effect of misrepresentation or simplification of the target phonemes (e.g. Serbian EFL learners might transcribe the word *chair* as /čer/). Bearing in mind that learners need a handy tool to help them read and pronounce target words correctly, without the aid of a teacher, learning the basic principles of phonemic transcription and the IPA alphabet represents a viable solution. It might contribute not only to the enhancement of EFL learners' pronunciation skills, but also to the expansion of their lexical knowledge. As all experienced English teachers know, listening to music, TV programs or movies with the aim of obtaining proper pronunciation is seldom enough for successful acquisition of English in a non-native setting. Advanced learners who mispronounce English words testify to this. Therefore, referring EFL learners to look up the phonemic transcription of unknown words in monolingual/bilingual dictionaries seems indispensable.

2. *Adrian Underhill's Sound Foundations*

An experienced teacher and teacher-trainer, Adrian Underhill, conceived an innovative approach to teaching pronunciation, different from the much-used conventional pronunciation teaching methods, in the sense that it attempts at making articulation empirically testable, i.e. visible, even touchable (UNDERHILL 2005). It emphasizes the physicality of sound production. By making students see or feel what is actually happening inside their mouths during the production of speech sounds, Underhill enhances students' awareness and enables them to produce sounds not only of English, but any other language for that matter.¹

¹ It is worth noting that Underhill's (2005) phonemic chart contains 44 IPA symbols (i.e. u: ʊ α: ʌ æ e ɪ i: ɔ: ɒ ɜ: ə p b d t g k m n ŋ s z f v ʃ ʒ θ ð h tʃ dʒ j r w l) which were slightly revised by A. C. Gimson in his *Introduction to the Pronunciation of English* (1962). This phonemic set represents the sounds that occur in the standard accent of

The method recognizes the principles according to which the IPA symbols are organized on the phonemic chart, considering the height and frontness/backness of the tongue for vowels, and the manner and place of articulation for consonants. The students are encouraged to participate, and the affective filter is lowered since the students perform most of the articulations in chorus. Forty-four symbols which represent English phonemes can be covered during a one-hour class session because the author believes it is possible to remember them all if a systematic approach is followed. Phonemic training begins with the first monophthong /i:/ in the chart, presenting its basic features, as well as the gesture by which the sound is to be pronounced. All the other sounds are learnt by connecting their features to the surrounding sounds. This way not only pronunciation is learnt, but the main characteristics of the sound system, i.e. segmental phonology are also presented. It is clear that Underhill follows the principles of the Silent Way to a certain extent, since, to make students aware of the gesture and the physical aspect of articulation, he suggests presenting students with an appropriate gesture for each sound. Students guess the articulation based on the gesture thus demonstrating that pronunciation can be learnt visually, and not only auditorily. The method is particularly useful for second language learners given that it emphasizes the fact that anyone can pronounce any sound of the human languages owing to the unique nature of the human predisposition - we all possess the necessary articulators. Accordingly, L2 learners have the ability to produce all target sounds, even those that are absent from their mother tongue inventories.

Taking the foregoing into consideration, as well as the manifest lack of research pertaining to pronunciation teaching, and more specifically phonemic transcription teaching, both at an international and local EFL level, we designed a post-test-only research study which explored the performance of two groups of EFL learners who were subjected to phonemic transcription training in accordance with two differing approaches, i.e. the traditional teaching method and the Underhill method.

British English (also known as Received Pronunciation or BBC English). Henceforth, when we make mention of the Underhill method and the IPA chart, we are exclusively referring to the aforementioned phonemic symbols. These symbols have been extensively used as the basis for textbooks and pronunciation dictionaries published in the UK.

3. Methodology

The aim of the study

The objective of this study was to compare two different instructional methods for teaching broad phonemic transcription and the IPA phonemic chart. We sought to determine the effectiveness of an innovative and relatively novel method of teaching pronunciation developed by Adrian Underhill (2005) in comparison to the traditional ex-cathedra, teacher-centred method of teaching broad phonemic transcription that commonly involves the presentation of the IPA symbols and their acquisition by means of rote memorization. To further investigate the possibility of implementing an unorthodox teaching method in the EFL classroom, we conducted a post-experimental survey with both groups of participants aimed at discovering the learners' preferences and attitudes.

Research questions

The present paper was fundamentally guided by the following research questions:

1. Is there a difference in the performance on transcription tests between the groups of learners subjected to two different teaching methods – the traditional and the Underhill method?
2. Which of the two methods can be regarded as more effective in teaching the IPA symbols and broad phonemic transcription?
3. Does task type affect students' performance on transcription tasks?
4. Does the overall proficiency level affect the performance on transcription tasks?
5. What are the learners' attitudes toward the applied methods of teaching the IPA chart and broad phonemic transcription?

Participants

The total number of EFL learners taking part in the study was 24, i.e. 12 in each experimental group. All the learners were native speakers of Serbian, students attending the third and fourth grade of the grammar school Svetozar Marković in Jagodina, Serbia. There were 9 male and 15 female participants (5 male and 7 female in group 1, and 3 male and 9 female in group 2), with the mean age 17.67. Without exception,

the participants had no prior knowledge of broad phonemic transcription, or the experience of participating in a specially designed instructional experiment targeting the acquisition of the IPA symbols. We made a principled decision not to give the participants a pre-test that would examine their knowledge of the IPA symbols and phonemic transcription because such a test might have alerted them to the purpose of phonemic training to come (cf. MACKEY & GASS 2005).

The participants did, however, take the Cambridge English: FCE for Schools² paper-based test before the start of the phonemic training. There were 9 participants at B1 level CEFR (140-159 marks range), and 15 participants at B2 level (160-179 marks range). It is worth mentioning that the test scores of B1-level students were very close to those achieved by the B2-level students (the largest difference was 4 points). Individual test scores are presented in Chart 1.

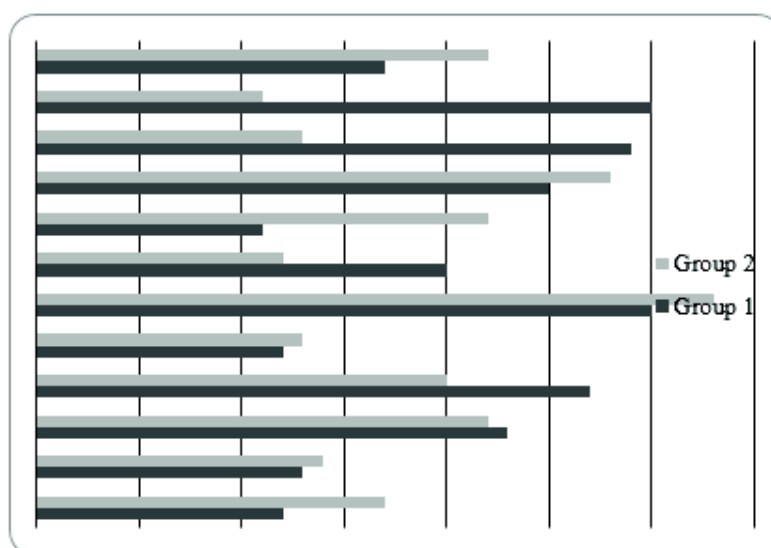


Chart 1. FCE test scores

To ensure the validity and comparability of the groups, we checked whether there was a difference in the FCE test scores distributed across groups. A t-test revealed that there was no statistically signifi-

² Sample Cambridge English: First for Schools tests are available at <http://www.cambridgeenglish.org/exams/first-for-schools/preparation/>.

cant difference whatsoever ($p=0.540$, $t=0.623$, St. error of difference: 2.94). Hence, the two groups could be deemed equal in terms of their overall English proficiency before the beginning of experimental phonemic training.

Instruments

Three different task types were designed to test the learners' performance once experimental phonemic training was over. Both groups received identical post-tests. The first task was the frequently used phonemic identification task. To perform it, the students listened to the instructor pronounce the sounds of English and their task was to circle the appropriate IPA symbols for the sounds in question (25 tokens overall). The second task was the commonly employed transcription practice, i.e. word transcription task. To complete it, the students listened to the instructor pronounce the word and their task was to transcribe this word (a total of 20 tokens). The same word was also provided in spelling to ensure that the actual transcription was tested and not listening, that is perception, as this issue exceeds the scope of the present paper. The third task was a production task - the students were presented with a paragraph from Douglas Adams's *Hitchhiker's Guide to the Galaxy* (2009: 264), containing 59 words transcribed using the IPA alphabet which had to be read aloud. The instructor evaluated the learners' performance and counted their errors, and so did the assessor whose sole duty was to listen to the students and keep track of the errors.³ The words for the tasks were carefully selected so as to conform to the recommended vocabulary list for the FCE level.⁴

As a follow-up, to ascertain the learners' views about experimental instructional practices, the investigators administered a questionnaire which contained ten 5-point Likert scale statements, ranging from strongly agree to strongly disagree. The questions were related to the effectiveness of the methods from the perspective of the students, their

³ The instructor was the participants' regular teacher who had spent three years teaching them, with fifteen years of teaching experience overall. The assessor was an experienced EFL teacher from a different secondary school who had been teaching English as a foreign language for ten years. The instructor and the assessor later compared their notes in search of discrepancies that might have a bearing on the results.

⁴ The suggested vocabulary list for FCE is available at <https://www.vocabulary.com/lists/104687#view=notes>.

innovativeness and effect on motivation, anxiety and willingness to participate. The questionnaire also contained questions pertaining to the effect of the methods on long-term retention of the IPA symbols and issues concerning the suitability of the methods for Serbian EFL curriculum.

Procedure

The participants were divided into two groups of 12, one being exposed to experimental phonemic training in line with the traditional method of teaching phonemic transcription and the IPA chart (which we shall henceforth term group 1 for the sake of conciseness and clarity) and the other (i.e. group 2) to experimental phonemic treatment in the manner of Underhill (2005). To our knowledge, the traditional method represents the most common way of teaching and explaining the phonemic chart. In other words, it is a teacher-oriented method, in which the instructor presents the symbols in chunks according to the chosen criteria and the students are supposed to memorize the symbols and use them in future exercises and tasks. The retention of the symbols and their successful application is dependent on students' self-engagement, usually through drills and repetition tasks. In our humble opinion, this sort of phonemic training requires a lot of time and effort but yields disputable learning outcomes as our experience of teaching the English Phonetics course with first-year English majors at the Faculty of Philology and Arts in Kragujevac has taught us. Our students often complain that phonemic transcription is too demanding or confusing to be acquired properly so they become demoralized easily.

The group that received the instruction according to the traditional model was presented with the symbols for monophthongs during the first session, diphthongs during the third and consonants during the third session. Along with the symbols, the instructor provided important pieces of information regarding the sound features. Students were also familiarized with the principles of phonemic transcription and each presentation was followed by drills. The last session was reserved for practice only, including phonemic dictation, word transcription, transcribed paragraph reading etc.

Adrian Underhill's method, as we have already explained in the introductory segments of the paper, tends to make pronunciation physical and establishes logical connections between the sounds and symbols, that is it makes the infamous phonemic chart easier to understand and

learn. Thus, the second group of Serbian EFL learners was subjected to phonemic training provided by their English teacher who received clear guidelines pertaining to the Underhill method in form of detailed explanations and video demonstrations. The authors of the paper made sure the instructor was thoroughly familiar with the method by observing one of his teaching sessions, so that group 2 could undergo the planned training in line with the original principles.

We purposefully focused on phonemic transcription and the effect which the Underhill method (2005) has on its teaching, though the method itself was originally conceived to give an impetus to the acquisition of English pronunciation, and not phonemic transcription per se. Teaching the phonemic chart constitutes only a part of Underhill's method of teaching the sounds of English. Notwithstanding the fact that the two are inseparable, we concentrated on the method's effectiveness in helping students learn the IPA symbols by testing the recognition of symbols and their practical use, disregarding altogether the testing of pronunciation.

The experimental training period lasted throughout May and June 2016, covering a total of four one-hour after class sessions for group 1 and two one-hour sessions for group 2, with students receiving course credits for participation. The difference in the number of training sessions is due to the different methods applied. Namely, Underhill (2005) states that it is possible to learn the whole IPA chart during a one-hour session, provided the method is systematically applied.⁵ We chose to include one more session in the experimental phonemic training program because the instructor had encountered the method for the first time, and needed more time to follow Underhill's principles consistently in the classroom. Having previous experience with the traditional method and its effectiveness, the instructor proposed that at least four teaching sessions be organized for group 1 students so there would be enough time to study and practice.

Once phonemic training was over, the students' performance was tested on three phonemic tasks. The tasks were not excessively time-consuming since the testing was performed during the two regular school classes, with the first two performed in about 20 minutes, and

⁵ Adrian Underhill's one-hour workshop 'Introduction to teaching pronunciation' is available at <https://www.youtube.com/watch?v=1kAPHyHd7Lo>.

the third one (with transcription reading) took slightly longer, about 30-35 minutes. Additionally, the students completed a questionnaire related to the very instructional practices they were subjected to in a ten-minute post-training session.

Data analysis

Descriptive statistics, including means, percentage counts, and several independent samples t-tests, were performed using the statistical software which is commonly used in applied linguistic research, SPSS version 20.0.

4. Results and discussion

After the experimental period, the two groups of participants took a post-test containing three tasks, as we have already explained in the previous section of the paper. Table 1 summarizes the findings for

<i>Task Type</i>	Group 1	Group 2
	(traditional method)	(Underhill method)
	n=12	n=12
<i>1. Phonemic identification</i> (maximum: 25)	Mean: 14.58	Mean: 20.58
	St. Deviation: 3.32	St. Deviation: 2.84
	Minimum: 10	Minimum: 17
	Maximum: 21	Maximum: 25
Task 1	p=0.000, t=4.759	
t-test results	St. error of difference: 1.26	
<i>2. Word transcription</i> (maximum: 20)	Mean: 10.83	Mean: 15
	St. Deviation: 4.12	St. Deviation: 1.60
	Minimum: 5	Minimum: 12
	Maximum: 18	Maximum: 17
Task 2	p=0.003, t=3.275	
t-test results	St. error of difference: 1.27	
<i>3. Reading the transcribed paragraph</i> (maximum: 59)	Mean: 34.67	Mean: 48.83
	St. Deviation: 7.36	St. Deviation: 4.53
	Minimum: 19	Minimum: 32
	Maximum: 45	Maximum: 54
Task 3	p=0.000, t=5.676	
t-test results	St. error of difference: 2.50	

each of the three tasks along with the data obtained by means of independent samples t-tests, with teaching methods coded as an independent variable and the results on the post-test coded as a dependent variable. Levene's Test for Equality of Variances proved not to be statistically significant for all the cases ($p < 0.05$) which enabled us to reliably interpret the t-test results.

Table 1. Mean scores and independent samples t-test results for tasks 1, 2 and 3

When we compare the results of the two groups, we notice considerable differences in mean scores in favor of group 2 across the three tasks. Namely, the difference in scores was statistically significant in all the cases, i.e. on the phoneme identification test ($p = 0.000$, $t = 4.759$), word transcription/phonemic dictation ($p = 0.003$, $t = 3.275$), as well as phonemic transcription reading task ($p = 0.000$, $t = 5.676$). The difference in the performance is fairly notable in the minimum and maximum scores, particularly for the first and third task. Statistically significant difference in mean scores demonstrated that the difference in scores was not due to chance, but due to the divergent effects of the applied methods on the process of learning the IPA symbols and phonemic transcription. Adrian Underhill's innovative method seems to be more effective in teaching the basics of phonemic transcription to secondary level EFL learners, who had no prior knowledge of the subject, than the traditional teacher-centred approach.

Even though the number of the participants was relatively small, the appreciable divergence between the results suggests that the Underhill method should be implemented on a larger sample if more valid conclusions are to be reached. Furthermore, the data indicate that the teaching of phonemic transcription can be introduced in regular EFL classes at secondary level of education, i.e. not only to undergraduate students taking specialized English linguistics or English Phonetics courses. This way learner autonomy can be enhanced and pronunciation skills improved as students become equipped with a tool that enables them to check the proper articulation of words in valid resources without having to rely on the teacher, or disputable internet sources.

To establish whether overall proficiency level could affect the performance on transcription tasks regardless of the applied teaching method, we performed additional analyses. They helped us determine whether there was a significant difference in scores between B1 and B2 level group. We established earlier that there was no statistical difference

in the distribution of B1 and B2 level students across the two groups undergoing two different teaching methods (which was indispensable for determining the actual effect of the instructional treatment). New statistical analyses revealed, however, that the differences in scores achieved by B1 and B2 level group were significant for all the tasks (see Table 2), which might indicate that a few points of difference on the scale between B1 and B2 level can actually be linked to considerable differences in performance, or that the slight differences on the FCE test may have been those concerning vocabulary knowledge. Further explanation may lie in a methodological issue - encountering the types of exercises we designed for the purpose of this study for the first time may have had a greater impact on the performance of B1-level students than that of B2-level students.

Task Type	B1 level n=9	B2 level n=15
<i>1. Phonemic identification</i>	Mean: 14.11 St. Deviation: 3.06	Mean: 19.67 St. Deviation.: 3.56
Task 1 <i>t-test results</i>	p=0.001, t=3.891 St. error of difference: 1.43	
<i>2. Word transcription</i>	Mean: 9.67 St. Deviation: 3.61	Mean: 14.87 St. Deviation: 2.11
Task 2 <i>t-test results</i>	p=0.002, t=4.493 St. error of difference: 1.16	
<i>3. Reading the transcribed paragraph</i>	Mean: 33.22 St. Deviation: 7.38	Mean: 46.87 St. Deviation: 6.23
Task 3 <i>t-test results</i>	p=0.000, t=4.850 St. error of difference: 2.81	

Table 2. Proficiency level differences across tasks

When phonemic training came to an end, we distributed a questionnaire to participants in both groups in order to explore whether there were any differences in the student attitudes towards the applied teaching methods. The results of the survey, together with the t-test scores for the differences observed in answers, are provided in Table 3.

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Statement		Strongly agree	Agree	Not sure	Disagree	Strongly disagree
<i>I believe the applied method for teaching phonemic transcription is interesting and innovative.</i>	1	2 16.67%	2 16.67%	3 25%	5 41.67%	/
	2	4 33.33%	4 33.33%	1 8.33%	2 16.67%	1 8.33%
<i>The method is helpful in teaching the IPA chart and phonemic transcription.</i>	1	3 25%	1 8.33%	2 16.67%	6 50%	1 8.33%
	2	3 25%	5 41.67%	/	1 8.33%	3 25%
<i>The method is engaging and motivating.</i>	1	/	2 16.67%	2 16.67%	4 33.33%	4 33.33%
	2	2 16.67%	5 41.67%	1 8.33%	3 25%	1 8.33%
<i>The method increases the anxiety and fear of failure among students.</i>	1	/	/	4 33.33%	5 41.67%	3 25%
	2	/	1 8.33%	1 8.33%	6 50%	4 33.33%
<i>The method encourages all students to participate.</i>	1	1 8.33%	2 16.67%	1 8.33%	6 50%	2 16.67%
	2	5 41.67%	6 50%	/	1 8.33%	/
<i>The method is confusing because it presents too much information.</i>	1	5 41.67%	1 8.33%	3 25%	5 25%	2 16.67%
	2	2 16.67%	2 16.67%	1 8.33%	4 33.33%	3 25%
<i>I believe the method is effective in providing long-term memory of the IPA symbols.</i>	1	/	3 25%	/	5 41.67%	4 33.33%
	2	4 33.33%	3 25%	/	2 16.67%	3 25%
<i>The method is suitable for Serbian EFL students and the curriculum.</i>	1	4 33.33%	3 25%	2 16.67%	2 16.67%	1 8.33%
	2	2 16.67%	7 58.33%	2 16.67%	1 8.33%	/
<i>The teacher needs to be well-acquainted with both the method and English phonology in general in order to achieve success.</i>	1	4 33.33%	5 41.67%	1 8.33%	1 8.33%	1 8.33%
	2	7 58.33%	2 16.67%	2 16.67%	1 8.33%	/
<i>I would like to repeat the experiment whenever possible.</i>	1	1 8.33%	1 8.33%	4 33.33%	3 25%	3 25%
	2	5	2	3	1	1

	41.67%	16.67%	25%	8.33%	8.33%
<i>t-test results</i>	Mean/St. Deviation: 1: 2.05/1.61 2: 3.55/1.96 p=0.0141 t=2.7033 St. error of difference: 0.555			Mean/ St. Deviation: 1: 3.00/1.84 2: 1.90/1.59 p=0.0285 t=2.3709 St. error of difference: 0.464	

Table 3. Results of the post-experimental survey with both groups of learners

A higher percentage of students from the second group (i.e. the one which underwent phonemic training following Underhill's recommendations) think that the applied teaching method is interesting, innovative, engaging and motivating, as well as helpful in teaching the IPA chart and phonemic transcription. The same students also found it encouraging. On the other hand, both groups agree that the applied methods are not intimidating, that is do not increase the anxiety and fear of failure among students. The presentation of too many pieces of information at a fairly short amount of time represented an issue with both groups, even though the percentage of students who believe so was slightly smaller in the second group. This is fairly surprising given that phonemic training with group 2 extended over only two sessions. An equal number of students from both groups agree that the teacher needs to be well-acquainted with both the method and English phonology in general in order to achieve success in teaching the fundamentals of phonemic transcription. Moreover, the majority of students from both groups agree that the methods are suitable for Serbian EFL curriculum. It is worth noting, though, that the Underhill approach is slightly favored in this respect since a larger number of students in group 2 have expressed positive attitudes toward it. The situation is quite different when it comes to the effectiveness of the two methods in providing long-term memory of the IPA symbols – only 25% of the learners in group 1 agree with this statement. Learners in group 2, however, for the most part support this idea. Similarly, only two participants from group 1 stated they would repeat the experiment whereas seven participants from group 2 expressed their wish to do so.

To sum up, the questionnaire provided valuable insights into student attitudes regarding the process of teaching and learning the phone-

mic chart and phonemic transcription in the EFL classroom. The results of the t-tests showed a statistically significant difference in the answers of two groups of learners ($p=0.0141$, $t=2.7033$ and $p=0.0285$, $t=2.3709$; i.e. $p<0.05$). Consequently, we might conclude that the students favor Adrian Underhill's approach to phonemic sensitization. We ascertained that their overall impressions and attitudes about this method are positive. Therefore, we are inclined to believe that the Underhill method should be used more extensively in the EFL instructional context. It is clearly suitable for secondary level students but it might find its application at lower levels of study as well given that most English textbooks in primary schools provide transcription of target lexical items in vocabulary lists. Teachers can adapt this approach to serve their purposes in the classroom (e.g. learning the pronunciation of a new word, looking up an unknown word in a dictionary, etc.) and encourage their learners to engage in activities that draw attention to phonemic transcription. The earlier EFL learners become acquainted with it, the greater the benefits.

5. Conclusion

The current study compared two different approaches to teaching the IPA chart and phonemic transcription. The participants, Serbian secondary level EFL learners, were divided into two groups which received phonemic training by means of either a traditional, teacher-oriented method that focuses on repetition drills, and a relatively under-researched, yet not entirely unfamiliar, Adrian Underhill's method (2005). The results of the tests performed after the experimental procedures show that the latter is more effective in teaching phonemic transcription to EFL learners. These findings are supported by data gathered by dint of a questionnaire – they emphasize the students' preference for the Underhill method. We also observed notable differences in the learners' performance depending on proficiency level - B2 level students, who had progressed further along the developmental path, produced better results on the tasks.

One possible limitation of the present study which prevents us from drawing reliable conclusions and generalizations is the size of the sample. A larger sample, of at least 15 to 30 participants per group, would have warranted more valid results (cf. MACKEY & GASS 2005). Moreover, retention of the symbols for both groups could have been in-

investigated through one or more delayed post-tests so the shorter and longer-term effects of the treatment could be determined. Furthermore, the very test aimed at examining the learners' phonemic transcription skill could have included more tasks. What prevented us from creating a more exhaustive test was the lack of time - the end of the school year was approaching and we had to address data collection issues (i.e. informed consent forms, timing of the teaching sessions and the like). To date, no studies have investigated the effectiveness of instructional practices relating to phonemic transcription so we could not simply borrow or modify an existing battery of tests or questionnaires. Future studies might include a larger sample, a different testing design and a repeated post-test, allowing us to better understand how English can be more effectively taught in the EFL setting.

Bearing in mind the scarcity of research in this field worldwide, and in the Serbian EFL context in particular, the positive results of the current study, regarding the effectiveness of the Underhill method, underline the possibility of introducing this innovative approach to teaching, not only the IPA chart, but also the basics of English phonology in general. Though preliminary in nature, due to the relatively small sample size, the statistically significant differences observed have important pedagogical implications. Namely, the results of the post-test demonstrate the effectiveness of Adrian Underhill's approach in helping students learn the IPA symbols which suggests that this method is recommendable for wider use in the Serbian EFL classrooms. The method's suitability was also confirmed by a post-experimental questionnaire that revealed the students' positive attitudes toward its features.

In conclusion, the Underhill method increased the students' motivation, participation and engagement, and enhanced their knowledge of the IPA symbols and phonemic transcription. It contributed to the learners' acquisition of theoretical knowledge of the subject as well as its practical application. We consider this to be particularly relevant because it fosters long-term learner autonomy. If they become acquainted with the IPA symbols, students can discover the correct pronunciations and detect mispronunciations on their own, without having to rely on somebody else's, often questionable, pronunciation alternatives. Finally, taking into consideration the universal applicability of the IPA symbols, the learners familiar with their form and function might articulate words and phrases more competently, not only in English, but in any other language, which can facilitate their future learning endeavors.

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НОВИ ПРИСТУП ПОДУЧАВАЊУ ФОНЕТСКИХ СИМБОЛА И ФОНЕМСКЕ ТРАНСКРИПЦИЈЕ: УВИДИ И ИМПЛИКАЦИЈЕ

Резиме

У раду се упоређују два различита наставна метода за учење основних карактеристика фонемске транскрипције и симбола Интернационалног фонетског алфабета – традиционални, који се најчешће користи, где је наставник у центру ученичке пажње и служи се бројним вежбама понављања, и један метод скоријег датума, у српском научном контексту готово потпуно неистражен, иновативни метод који предлаже тренер за наставнике и међународно признати стручњак, посебно у настави изговора енглеског језика, Ејдријан Андерхил. Овај метод осмишљен је с идејом да изговор треба да постане физички опипљив и видљив, дакле, један емпиријски доживљај. Како бисмо утврдили да ли постоје разлике у ефикасности поменути два метода спровели смо истраживање са 24 испитаника који су били подељени у две групе. Свака група прошла је неколико наставних сесија на којима су представљени табела релевантних фонетских симбола и основне карактеристике фонемске транскрипције енглеског језика. Након обуке, испитаници су урадили пост-тест са три типа задатка, и попунили анкету којом смо желели да сазнамо ставове ученика о примењеним методама, првенствено у погледу њихове ефикасности, применљивости и занимљивости. Иако су добијени подаци прелиминарног карактера јер је у истраживању учествовао мали број испитаника, резултати имају важне педагошке импликације јер указују на значајне предности Андерхиловог метода у односу на традиционални, нарочито када је у питању памћење симбола и општи успех у савладавању принципа фонемске транскрипције. Складно томе, у раду се наглашава могућност чешће примене датог метода у настави фонемске транскрипције енглеског језика, али и осталих светских језика, имајући у виду универзалност употребе симбола.

Кључне речи: фонемска транскрипција, Интернационални фонетски алфавет, наставне методе, Ејдријан Андерхил, енглески као страни језик

Appendix: Phonemic tasks

TASK 1

Listen carefully to the instructor pronouncing a sound of English. Circle the appropriate IPA symbol of the sound you hear. Each sound will be pronounced twice.

u: ʊ ɑ: ʌ æ e i i: ɔ: ɒ ɜ: ə
 p b d t g k
 m n ŋ
 s z f v ʃ ʒ θ ð h
 tʃ dʒ
 j r w l

TASK 2

Listen carefully to the instructor pronouncing the following words and transcribe them phonemically. Each example will be read twice.

afternoon	surprise
accountant	suggestion
answer	special
appearance	sparkling
Thursday	shopping
young	routine
winner	restaurant
umbrella	receipt
together	poor thing
temperature	personality

afternoon		surprise	
accountant		suggestion	
answer		special	
appearance		sparkling	
Thursday		shopping	
young		routine	
winner		restaurant	
umbrella		receipt	
together		poor thing	
temperature		personality	

TASK 3

Please read the following transcribed paragraph carefully:

hi: geɪzd 'ki:nli 'intu: ðə 'dɪstəns ænd lɔkt æz ɪf hi: wʊd kwaɪt laɪk ðə wɪnd tə bləʊ
 hɪz heə bæk drə'mætɪk' lɪ æt ðæt pɔɪnt | bʌt ðə wɪnd wʊz 'bɪzɪ 'fʊ:lɪŋ ə'raʊnd
 wɪð sʌm li:vz ə 'lɪtl weɪ ɒf || ðeər ɪz ə 'məʊmənt ɪn 'evrɪ dɔ:n wen laɪt fləʊts | ðeər
 ɪz ðə ,pɒsə'bɪlɪtɪ ɒv 'mædʒɪk || krɪ'eɪʃən həʊldz ɪts breθ ||