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Citation style: Lipińska Dorota. (2017). Minimal pairs? Minimal difficulty! Vowel perception in young learners. "Beyond Philology" (No. 14/1 (2017), s. 125-141).



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Minimal pairs? Minimal difficulty! Vowel perception in young learners

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*Received 1.10.2016,
received in revised form 24.07.2017,
accepted 27.07.2017.*

Abstract

Most teachers are familiar with the rule “the earlier, the better” and that it is much easier to teach proper pronunciation from the very beginning than to correct fossilized pronunciation errors at later stages (e.g. Baker 1996; Nixon and Tomlinson 2005). While young children are able to acquire L2 phonetics by listening to stories, songs etc., teenagers who are about 13 years old are much more conscious learners (Nixon and Tomlinson 2005) and may start learning pronunciation just like they study L2 grammar or vocabulary.

Since it is often said that perception precedes production, the aim of this paper is to present some teaching methods aimed at training young learners of English in vowel perception. It also reports the results from classes in which these methods were used, which prove that young teenagers can easily learn to discriminate vowel pairs and thus also improve their listening skills.

Key words

perception, phonetic training, pronunciation teaching, vowels, young teenagers

Pary minimalne? Minimalne trudności! Percepcja spółgłosek przez młodszych nastolatków uczących się języka angielskiego jako obcego

Abstrakt

Większość nauczycieli języków obcych jest świadoma zasady “im wcześniej, tym lepiej”. Wiedzą oni też, że znacznie łatwiej jest uczyć prawidłowej wymowy w języku obcym od samego początku, niż poprawiać mocno zakorzenione błędy na późniejszych etapach edukacji (np. Baker 1996; Nixon and Tomlinson 2005). Podczas gdy małe dzieci są w stanie łatwo przyswoić prawidłową wymowę języka drugiego słuchając piosenek, rymowanek czy historyjek, nastolatki w wieku od około 13 roku życia są znacznie bardziej świadomymi uczniami (Nixon and Tomlinson 2005) i mogą zacząć uczyć się fonetyki J2 w taki sam sposób, w jaki uczą się obcej gramatyki czy słownictwa.

Ponieważ percepcja dźwięków poprzedza ich produkcję, celem niniejszego artykułu jest zaprezentowanie różnych metod nauczania fonetyki języka obcego ze szczególnym uwzględnieniem treningu percepcji głosek. Są to metody przewidziane dla młodszych nastolatków uczących się języka angielskiego. Ich skuteczność jest udowodniona przez badanie przeprowadzone w wyniku takich zajęć. Badanie wykazało, że młodsze nastolatki są w stanie nauczyć się różnic segmentalnych, dobrze rozróżniają samogłoski, a to pomaga usprawnić nie tylko ich wymowę, ale również umiejętność rozumienia ze słuchu.

Słowa kluczowe

nastolatki, nauka wymowy, percepcja, samogłoski, trening fonetyczny

1. Introduction

For over twenty years a significant growth has been observed in the number of studies concerning foreign/second language pronunciation. In spite of this, there are still areas which need further and more detailed exploration (e.g. Schwartz et al.

2014). This is especially true for education, where study results are surprisingly rarely applied in practice.

The case of FL pronunciation teaching in Polish schools illustrates this situation quite well. Numerous studies by Polish researchers carried out since the 1990s have shown that the teaching of pronunciation is practically non-existent during foreign/second language classes. Moreover, even L2 learners are dissatisfied with their own pronunciation skills and highly critical in connection with their teachers' pronunciation in English (e.g. Lipińska 2014; Majer 2002; Nowacka 2003, 2008; Sobkowiak 2002; Szpyra-Kozłowska 2003, 2008; Szpyra-Kozłowska et al. 2002; Waniek-Klimczak and Dłutek 2003; Waniek-Klimczak 2002, 2006; Wrembel 2002; Wysocka 2003). To be more precise, the results of the studies mentioned above have revealed that, first of all, L2 teachers do not teach English pronunciation at all and only sometimes correct their students' mistakes (this was the only "phonetic" element of L2 classes observed by the informants). Secondly, they use pseudo-phonetic transcription instead of IPA which leads to fossilization of pronunciation errors. Moreover, learners have noticed that their teachers' pronunciation in English is full of mistakes and that many of them resign from using English during foreign language classes. As a result the learners' pronunciation in English is also far from correct. In addition, "being communicative" in an L2 has recently become the aim of language learners. As a result, it has been suggested that L2 teachers should concentrate on conversation skills, and avoid too much instruction in other skills, such as grammar as this will be learned incidentally without formal input. Nevertheless, if a person wants to communicate successfully in a language, they also have to acquire (or learn) correct pronunciation (e.g. Komorowska 2011). The most crucial abilities here are understanding other speakers and being understood by other language users, which means that one's speech must be intelligible enough to convey the intended message (e.g. Tarone 1978; Beebe 1984; Littlewood 1994). Learners frequently claim that

they do not need correct pronunciation in their target language as they are not going to communicate with the native speakers of a given language. However, the ability to speak correctly is necessary not only for communication with the native speakers of a particular language, but also with other non-native users. The explanation for this is that as various users do not share the same language background, their pronunciation is in consequence influenced by different interlingual factors being the effect of their mother tongue and its characteristics (Littlewood 1994; Setter and Jenkins 2005). This means that if they do not work on their pronunciation, this may lead to communication breakdown even with non-native speakers of English.

2. The Critical Period Hypothesis and teaching L2 phonetics to young learners

Teaching any L2 skills, correct pronunciation among them, seems to be vital from the very beginning, especially when we take the Critical Period Hypothesis (Lenneberg 1967) into consideration. At the beginning Lenneberg's theory concerned only first language acquisition. The author claimed that the critical period starts around the age of two and lasts until a child reaches the age of puberty. After this period the acquisition of one's mother tongue becomes virtually impossible. Lenneberg also highlighted that language function is gradually lateralized in the left brain hemisphere. He declared that this process explained the existence of a critical/sensitive period for the emergence and establishment of a language (Puppel 1996). After some time, the theories included in the Critical period Hypothesis were extended to include second language acquisition. Thus the central hypothesis for L2 appeared, claiming that if the critical period is a real phenomenon, learning the second language after puberty must be much more demanding and complicated than before it (Puppel 1996). There have been a number of attempts to prove this hypothe-

sis (e.g. Krashen 1975; Ervin-Tripp 1974; Klein 1986). Nevertheless, it appears that the expected differences between L2 acquisition before and after the age of puberty are not as significant as was believed. However, one point was important: in most cases the earlier the subjects started learning a second language, the better their pronunciation in that language.

How can this be explained? The situation might be a result of the process of fossilisation of interlanguage phonology. There are even claims that the fossilization of L2 phonology is bound to happen when adolescents and adults learn an L2 (e.g. Wysocka 2007). Still, there are various opinions on this matter. While some researchers (e.g. Scovel 1969) maintain that no adult will ever be able to achieve native-like pronunciation in their L2, others state that although it may not be easy, it is still possible for adult language users to do so, and that there were cases when adults did achieve such a level of pronunciation in the target language (Tarone 1978). One could ask here: what then is the most probable reason for phonological fossilisation? Several potential explanations might be presented.

First of all, there is a highly physiological approach to the aforementioned process. It could be explained that some human muscles and nerves practise the same set of pronunciation habits and movements for years and thus undergo a process of atrophy while they get older. This kind of situation results in purely physiological problems in acquiring new pronunciation patterns as the articulators are to some extent “stiff” (Tarone 1978). As Gumbaridze (2012) adds, it is also connected to psychology since faulty forms often become so fixed and persistent in learners’ minds that some individuals are unable and unwilling to correct them. Other proposed explanations are of a purely psychological nature. Krashen (1977), for instance, claims that fossilisation is closely connected to the critical period in SLA when an individual simply starts to *learn* a language consciously rather than *acquire* it naturally as children usually do. DeKeyser (2006) adds here

that cognitive maturation results in a diminishing capacity for the implicit learning of complex abstract systems (such as the sounds system of various languages). Guiora et al. (1972) and Neufeld (1978), on the other hand, are in favour of the affective argument and highlight the fact that adult learners may have a potential lack of empathy with the native speakers and culture of a target language or even possibly a negative attitude towards the language, speakers and culture. However, more recent papers question the opinions described above (e.g. Singleton 2005) and current studies show that fossilized pronunciation can be rehabilitated and improved (e.g. Acton 1984; Demirezen 2009; Lipińska 2013b). What is more, some researchers (e.g. Porzuczek and Rojczyk 2010) notice that the human capability to learn new, foreign sounds is not limited or lost after the age of puberty and that language learners are able to master L2 pronunciation at an advanced level even as adults.

Having taken the aforementioned arguments into consideration and the fact that there is no clear explanation as to what extent the Critical Period influences the learning of foreign language pronunciation (e.g. Hytlenstam and Abrahamsson 2003; Singleton 2007), the majority of L2 teachers still decide that, “the earlier, the better”, as they know that it is much easier to teach correct pronunciation from the very beginning of L2 instruction than to correct fossilized pronunciation errors at later stages (e.g. Baker 1996; Nixon and Tomlinson 2005). It also needs to be added that young children are simply able to *acquire* correct pronunciation in their L2 thanks to the appropriate input – for example by listening to stories, songs, nursery rhymes or by playing games. Teenage learners who are above thirteen years of age, on the other hand, are already much more conscious learners (Nixon and Tomlinson 2005) and are able to start *learning* pronunciation in the same way they are instructed in L2 grammar or vocabulary.

3. Current study

The first aim of this paper is a brief presentation of materials and methods which may be successfully used for teaching pronunciation to young teenagers (11–13 year-old primary school learners). The resources are diversified and cover a wide variety of tasks and activities – from various exercises already included in textbooks to copious online interactive games. Another (and the main) aim of this paper is to prove the effectiveness of applying such methods in a pilot study on vowel discrimination in minimal pairs by teenage learners of English.

3.1. Subjects

The group of subjects consisted of six 12-year-old primary school students (6th-graders). All of them were female. The subjects had been studying English for 5-6 years prior to the study. They had all attended an English course in a language school since they were 4th-graders. The course was characterized by an original curriculum designed by the author of this paper. The course not only aimed at teaching general English, suitable for young teenagers in terms of grammar and vocabulary, but also prepared the subjects to the school-leaving exam (*Sprawdzian Szóstoklasisty*), and – what is most important for this paper – included a pronunciation module wholly designed by the author.

3.2. Methods

The subjects who participated in the study had been exposed to the phonetic training module for approximately two and a half years. The module included both the training of speech perception and production. A particular emphasis was placed on segmental phonetics – the topics covered vowels (monophthongs), diphthongs and consonants. During the study the subjects performed a discrimination task including minimal

pairs. The informants were given a printed list of minimal pairs in which only the vowel sound was different. The words were not only presented in their written form, but also additionally the IPA symbols for the vowel sounds were written at the top of each category. The subjects listened to the recorded words and were asked to circle the correct option. The recordings were played twice. All the words were recorded by a female phonetician. The recordings were not randomized, but played in groups (e.g. first recordings for groups /ɪ/ vs. /i:/, then /ʌ/ vs. /æ/ and so on). The minimal pairs included monophthongs and diphthongs and were as follows:

- /ɪ/ vs. /i:/,
- /ʌ/ vs. /æ/,
- /æ/ vs. /eɪ/,
- /e/ vs. /ɜ:/,
- /ʊ/ vs. /u:/,
- /ɔ:/ vs. /ɔɪ/,
- /i:/ vs. /aɪ/.

There were five words in each group and seven groups which gave 35 tokens for each subject. Multiplied by six participants this gave 210 tokens altogether ready for analysis. The figure below shows a sample list (containing the minimal pair /æ/ vs. /eɪ/) which was used during the study.

Table 1

A sample list used in the study (contains the /æ/ vs. /eɪ/ words)

	æ	eɪ
1	mad	made
2	Mac	make
3	back	bake
4	tack	take
5	black	Blake

3.3. Materials used in the pronunciation training

The following section presents the materials which were used in the pronunciation module included in the language course which the subjects attended. The materials ranged from books aimed at teaching pronunciation and textbooks designed for primary schools, to various online activities and exercises.

The first resource used in the phonetic training was the *Primary Pronunciation Box* (Nixon and Tomlinson 2005). This is a photocopiable book specially designed to teach English pronunciation to children and young teenagers, divided into parts, according to the learners' ages. The book is accompanied by an audio CD which enables learners to familiarize themselves with correct pronunciation in the L2, to practise it and to do various phonetic exercises. It also helps the teacher as they do not need to provide a model of the target language. Since the book contains over sixty activities of various types (rhymes, chants, poems, puzzles, dominoes and copious games) the process of learning English pronunciation is pleasant and the learners do not get bored. The book was designed for language teachers generally – not only phoneticians – and because of this each worksheet contains a clear, step-by-step lesson plan explaining how to prepare and do the activities in the classroom. Furthermore, the book can be used together with any textbook since the range of topics is universal and not assigned to any particular ESL/EFL course.

Materials from two textbooks designed for primary school were also used to train the subjects of the study in correct pronunciation. The first of them was *Steps in English* (Falla et al. 2012), which served as the main textbook during the whole course, and another was *Evolution Plus* (Beare 2014). In both series each chapter of the textbook includes pronunciation boxes, chants or other simple activities. They are short but can be easily extended with the use of additional materials or games based on the topic from the textbook. All the recordings are included in the teacher's audio CDs, which enables learn-

ers to copy correct pronunciation patterns. It is also worth noting that nowadays most textbooks written for primary schools learners include activities on pronunciation training (Lipińska 2017).

Finally, probably the most attractive group of activities were online games from two websites, namely <http://cambridgeenglishonline.com/Phonetics_Focus> and <<http://eslgamesworld.com/members/games/pronunciation/index.html>>. These two sites provided activities that were enjoyed by the subjects and all were done with the use of an interactive whiteboard. The first of the websites contains not only a great number of diverse exercises which can be done individually or in teams, but also provides printable .pdf flashcards with IPA symbols accompanied by sample words and pictures. The latter site is full of team games which concentrate on perception and production skills, as well as the ability to read and use IPA transcription. This was particularly useful as young teenagers enjoy competition. As a result, during the course, they eagerly played in two groups trying to win the games and get a prize.

3.4. The study results

As has already been written, the study participants were exposed to the aforementioned methods of pronunciation training for two and a half years and then participated in a study on speech perception (and more precisely on vowel discrimination). Table 2 shows the results achieved in this part of the research.

As can be seen in Figure 2, the subjects achieved good results in the vowel discrimination task (similar to the case of a speech production task – see Lipińska, in press). It must also be remembered that young teenagers graduating from primary school in Poland are characterized by an A1 level of proficiency in a foreign/second language (however, the group of subjects could be more appropriately placed at A2 level), so they are still beginner/elementary users of the L2. In this light their

results are exceptionally good, especially if compared to older learners who rarely achieve this level of correctness (e.g. Rojczyk 2010, Lipińska 2013a). The easiest vowel pairs were /æ/ vs. /eɪ/, /ɔ:/ vs. /ɔɪ/ and /i:/ vs. /aɪ/, so those containing a monophthong vs. diphthong. It is not the most typical contrast in phonetic studies, but it is often included in teaching materials for both teenagers and adults, as learners frequently encounter difficulties in discriminating between these two kinds of sounds. The most difficult vowel pair, on the other hand, was /ʊ/ vs. /u:/ which is in accordance with previous studies on this topic (e.g. Lipińska 2013a). This pair is often demanding for Polish learners of English whose native vowel system is much more limited and contains only one similar vowel, namely /u/.

Table 2

The results of the study on vowel discrimination

Vowel 1	Vowel 2	Correct recognitions
ɪ	i:	76.6%
ʌ	æ	90%
æ	eɪ	100%
e	ɜ:	90%
ʊ	u:	60%
ɔ:	ɔɪ	100%
i:	aɪ	100%

4. Conclusions

It can be concluded that there are a great number of diversified resources that can be used in the classroom in order to teach correct pronunciation of English to young teenagers (and other groups of learners). One can mention here tailor-made books aimed at teaching pronunciation and designed for young

learners, tasks and activities already included in standard textbooks, and attractive websites containing copious interactive phonetic activities. Very few of them were analysed in this article, although it is possible for teachers to find unlimited resources online and in printed form. Thus, the claim that teachers do not teach pronunciation in schools because of a lack of appropriate materials can be refuted.

Although the study is preliminary and should be treated as a pilot, it suggests that adding a pronunciation training module to a general English course can be very useful at the beginning of language *learning*. Young teenagers are able to learn English pronunciation in a similar way to vocabulary or grammar and, if provided with appropriate input, should not encounter any difficulties. Indeed, thanks to the pronunciation training they received, the group of subjects who participated in this study were able to achieve good results in a speech perception test and successfully discriminate between similar words or similar vowel sounds.

Finally, if good pronunciation in an L2 facilitates communication, learners are more likely to understand their interlocutors. This can also decrease the level of stress connected with perceptual constraints which are often the reason for an unwillingness to communicate at the beginner level. Moreover, it improves listening comprehension skills necessary at higher educational levels and for examinations. Thus pronunciation training proves to be not only feasible, but also beneficial.

References

- Baker, Ann (1996). *Introducing English Pronunciation: A Teacher's Guide to 'Tree or Three?' and 'Ship or Sheep?'* Cambridge: Cambridge University Press.
- Beare, Nick (2014). *Evolution Plus 1. Student's Book*. London: Macmillan Education.
- Beebe, Leslie (1984). "Myths about interlanguage phonology". *Studies in Descriptive Linguistics* 13. In: Eliason, Stig (ed.). *Theoretical Is-*

- sues in Contrastive Phonology*. Heidelberg: Julius Groos Verlag, 51-62.
- DeKeyser, Robert (2006). "A critique of recent arguments against the critical period hypothesis". In: Christian Abello-Contesse, Ruben Chacón-Beltrán, M. Dolores López-Jiménez, Maria del Mar Torreblanca-López (eds.). *Age in L2 Acquisition and Teaching*. Bern: Peter Lang, 49-58.
- Demirezen, Mehmet (2009). "A model to rehabilitate a fossilized pronunciation error of Turkish English language teachers: The nasal devoicing of /ŋ/ as /ŋk/". *Procedia Social and Behavioral Sciences* 1: 2722-2727.
- Ervin-Tripp, Susan M. (1974). "Is second language learning like the first?" *TESOL Quarterly* 8: 111-127.
- Falla, Tim, Paul A. Davies, Sylvia Wheeldon, Paul Shipton, Ewa Palczak (2012). *Steps in English 1. Student's Book*. Oxford: Oxford University Press.
- Falla, Tim, Paul A. Davies, Paul Shipton, Ewa Palczak (2012a). *Steps in English 2. Student's Book*. Oxford: Oxford University Press.
- Falla, Tim, Paul A. Davies, Paul Shipton, Ewa Palczak (2012b). *Steps in English 3. Student's Book*. Oxford: Oxford University Press.
- Guiora, Alexander Z., Benjamin Beit-Hallahmi, Robert C. L., Brannon, Cecelia Y. Dull, Thomas Scovel (1972). "The effects of experimentally induced changes in ego states on pronunciation ability in a second language: An exploratory study". *Comprehensive Psychiatry* 13: 421-428.
- Gumbaridze, Jujuna (2012). "Error correction in EFL speaking classrooms". *Procedia – Social and Behavioral Sciences* 70: 1660-1663.
- Hyltenstam, Kenneth, Niclas Abrahamsson (2003). "Maturational constraints in SLA". In: Catherine Doughty, Michael H. Long (eds.). *The Handbook of Second Language Acquisition*. Malden, MA: Blackwell, 539-588.
- Klein, Wolfgang (1986). *Second Language Acquisition*. Cambridge: Cambridge University Press.
- Komorowska, Hanna (2011). *Metodyka nauczania języków obcych*. Warszawa: Fraszka Edukacyjna.
- Krashen, Stephen D. (1975). "The critical period for language acquisition and its possible basis". In: Doris Aaronson, Robert W. Rieber (eds.). *Developmental Psycholinguistics and Communication Disorders. Annals of the New York Academy of Sciences*. Vol. 263, 211-224.

- Krashen, Stephen D. (1977). "Some issues relating to the monitor model". Paper presented at the TESOL Convention, Miami Beach, FL.
- Lipińska, Dorota (2013a). "Luke, these sheep's seen keen' (and other misperceptions of a learner's ear)". In: *Proceedings of 3rd International Conference on English Pronunciation: Issues & Practices*, 69-72. CD-ROM.
- Lipińska, Dorota (2013b). "Influence of formal instruction in English phonetics and phonology on Polish learners' production of English /æ/". In: Joanna Przedlacka, John Maidmentand, Michael Ashby (eds.). *Proceedings of PTLC 2013: Papers from the Phonetics Teaching and Learning Conference, London 8-10 August*. London: Chandler House, 59-62. e-book PDF.
- Lipińska, Dorota (2014). "Polish learners' attitudes towards learning English pronunciation: Revisited". In: Olga Majchrzak (ed.). *PLEJ_3 czyli psycholingwistyczne eksploracje językowe*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Lipińska, Dorota (2017). "Teaching EFL: Is the pronunciation component present in textbooks for primary school?" In: Elżbieta Krawczyk-Neifar (ed.). *Continuity and Change. And What Next?* Katowice: Wydawnictwo Wyższej Szkoły Zarządzania Ochroną Pracy w Katowicach, 47-59.
- Lipińska, Dorota (in press). "Teaching pronunciation to primary school learners and its influence on L2 speech production". *Annales Universitatis Paedagogicae Cracoviensis. Studia Paedagogica*.
- Littlewood, William T. (1994). *Foreign and Second Language Learning: Language-Acquisition Research and Its Implications for the Classroom*. Cambridge: Cambridge University Press.
- Majer, Jan (2002). "Sick or seek? Pedagogical phonology in teacher training". In: Ewa Waniek-Klimczak, Patrick James Melia (eds.). *Accents and Speech in Teaching English Phonetics and Phonology*, Frankfurt am Main: Peter Lang, 153-176.
- Neufeld, Gerald (1978). "On the acquisition of prosodic and articulatory features in adult language learning". *The Canadian Modern Language Review* 34: 163-174.
- Nixon, Caroline, Michael Tomlinson (2005). *Primary Pronunciation Box*. Cambridge: Cambridge University Press.
- Nowacka, Marta (2003). "Analiza i ocena wymowy słuchaczy NKJO w Rzeszowie". *Zeszyt Naukowy Instytutu Neofilologii 2. Zeszyty Naukowe PWSZ w Koninie* 1/2: 46-55.

- Nowacka, Marta (2008). "How far is 'Hanover' from 'hangover'? Mis-perception of Polish ear". In: Ewa Waniek-Klimczak (ed.). *Issues in Accents of English*. Newcastle: Cambridge Scholars Publishing, 272-303.
- Porzuczek, Andrzej, Arkadiusz Rojczyk (2010). "Przegląd interaktywnych programów internetowych wspomagających autonomię ucznia w nauce wymowy angielskiej". In: Krystyna Drożdżał-Szelest (ed.). *Materiały edukacyjne w nauczaniu języków obcych: Teoria i praktyka*. Gorzów Wielkopolski: Wydawnictwo Państwowej Wyższej Szkoły Zawodowej w Gorzowie Wielkopolskim, 235-245.
- Puppel, Stanisław (1996). *A Concise Guide to Psycholinguistics*. Poznań: Bene Nati.
- Rojczyk, Arkadiusz (2010). "Production and perception of vowel 'ash' by Polish learners of English". In: Katarzyna Dziubalska-Kołaczyk, Magdalena Wrembel, Małgorzata Kul (eds.). *Proceedings from the Sixth International Symposium on the Acquisition of Second Language Speech*. CD-ROM.
- Schwartz, Geoffrey, Anna Balas, Arkadiusz Rojczyk (2014). "External sandhi in L2 segmental phonetics – final (de)voicing in Polish English". *Concordia Working Papers in Applied Linguistics* 5: 637-649.
- Scovel, Tom (1969). "Foreign accents, language acquisition and cerebral dominance". *Language Learning* 19: 245-254.
- Setter, Jane, Jennifer Jenkins (2005). "Pronunciation". *Language Teaching* 38: 1-17.
- Singleton, David (2005). "The Critical Period Hypothesis: A coat of many colours". *International Review of Applied Linguistics in Language Teaching* 43/4: 269-285.
- Singleton, David (2007). "The Critical Period Hypothesis: Some problems". *Interlinguistica* 17: 48-56.
- Sobkowiak, Włodzimierz (2002). "English speech in Polish eyes: What university students think about English pronunciation teaching and learning". In: Ewa Waniek-Klimczak, Patrick James Melia (eds.). *Accents and Speech in Teaching English Phonetics and Phonology*, Frankfurt am Main: Peter Lang, 177-196.
- Szpyra-Kozłowska, Jolanta (2003). "Miejsce i rola fonetyki w międzynarodowych egzaminach Cambridge, TOEFL i TSE". *Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej w Płocku: Neofilologia* 5 (Dydaktyka fonetyki języka obcego ed. by Włodzimierz Sobkowiak, Ewa Waniek-Klimczak): 181-192.

- Szpyra-Kozłowska, Jolanta (2008). "English pronunciation pedagogy in Poland – achievements, failures and future prospects". In: Ewa Waniek-Klimczak (ed.). *Issues in Accents of English*. Newcastle: Cambridge Scholars Publishing, 212-234.
- Szpyra-Kozłowska, Jolanta, Justyna Frankiewicz, Wiktor Gonet (2002). "Aspekty fonetyki angielskiej nauczane w polskich szkołach średnich". *Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej w Płocku: Neofilologia 2 (Dydaktyka fonetyki języka obcego* ed. by Włodzimierz Sobkowiak, Ewa Waniek-Klimczak): 9-28.
- Tarone, Elaine (1978). "The phonology of interlanguage". In: Jack C. Richards (ed.). *Understanding Second and Foreign Language Learning*. Rowley, MA: Newbury House, 15-33.
- Waniek-Klimczak, Ewa (2002). "Context for teaching English phonetics and phonology". In: Ewa Waniek-Klimczak, Patrick James Melia (eds.). *Accents and Speech in Teaching English Phonetics and Phonology*, Frankfurt am Main: Peter Lang, 139-152.
- Waniek-Klimczak, Ewa (2006). "Fonetyka w kształceniu nauczycieli: analiza wybranych aspektów 'Teacher Talk' na przykładzie języka angielskiego polskich nauczycieli praktykantów". *Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej w Płocku: Neofilologia 8 (Dydaktyka fonetyki języka obcego* ed. by Włodzimierz Sobkowiak, Ewa Waniek-Klimczak): 247-250.
- Waniek-Klimczak, Ewa, Aneta Dłutek (2003). "Ocena języka mówionego – aspekt fonetyczny". *Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej w Płocku: Neofilologia 5 (Dydaktyka fonetyki języka obcego* ed. by Włodzimierz Sobkowiak, Ewa Waniek-Klimczak): 243-266.
- Wrembel, Magdalena (2002). "Miejsce fonetyki języka angielskiego w szkole – implikacje dla kształcenia nauczycieli". *Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej w Płocku: Neofilologia 2 (Dydaktyka fonetyki języka obcego* ed. by Włodzimierz Sobkowiak, Ewa Waniek-Klimczak): 29-40.
- Wysocka, Hanna (2003). "Czy/Jak uczyć fonetyki języka obcego?" *Zeszyt Naukowy Instytutu Neofilologii 2. Zeszyty Naukowe PWSZ w Koninie 1/2*: 159-184.
- Wysocka, Marzena S. (2007). "Symptoms of fossilization in advanced learners and users of English". In: Janusz Arabski, Danuta Gabryś-Barker, Andrzej Łyda (eds.) *PASE Papers 2007: Studies in Language and Methodology of Teaching Foreign Languages*. Katowice: PARA, 96-105.

Internet Sources

ESL Games. Available at <<http://eslgamesworld.com/members/games/pronunciation/index.html>>. Accessed 20.02.2016.

Cambridge English Online. Available at <http://cambridgeenglishonline.com/Phonetics_Focus>. Accessed 20.02.2016.

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