USE OF L2 PRONUNCIATION TECHNIQUES IN AND OUTSIDE CLASSES: STUDENTS' PREFERENCES

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Abstract

The present study describes the level of effectiveness of both traditional and computer-assisted second language pronunciation techniques from the students' perspectives. By traditional techniques we mean those activities which make use of phonetic alphabet, including transcription practice, detailed description of the articulatory systems, drills (e.g. minimal pair drills), reading aloud, tongue twisters, rhymes, etc. (Hismanoglu and Hismanoglu 2010: 985). On the other hand, computer-assisted techniques include activities based on listening and imitating tasks, which use technology, such as self-imitation practice, recordings of L2 learner's, visual aids, and automatic speech recognition tools. The main aim of this study does not aim to classify L2 pronunciation methods by allocating them to previously mentioned categories but rather attempts to examine the intricate relationship between students' knowledge, perceptions, attitudes and their most preferable practices which, in their opinion, result in improvement of their L2 pronunciation.

118 study subjects were asked to complete four main questions, within which tasks based on the Likert-scale items gathered data about the students' most preferable L2 pronunciation teaching and learning techniques. The students were asked to create their own list, starting from the most useful to the least beneficial techniques. The last task was an open-ended question about other techniques than mentioned in the questionnaire.

The analysis of the obtained data involved a two-stage process: a) data segmentation; and b) techniques categorisation. The first step was to select pronunciation learning techniques in terms of their frequency and use and to adjust them to the research group. The second stage, techniques categorisation, was based on a careful analysis of the answers given by the students in the questionnaire. Following that, five categories were distinguished: (1) traditional and used only in the classroom, (2) traditional but also used in distance learning, (3) computer-assisted but used only in the classroom, (4) computer-assisted and also used in distance learning, (5) innovative: combining students' needs and available online.

Highlighting the prominence of pronunciation in acquiring communicative competence, the authors propose their own, innovative suggestions for the future creation of teaching materials.

Key words: foreign language teaching, pronunciation teaching techniques, foreign language phonetics and phonology, e-learning

1. Introduction

One of the goals of learning and teaching L2 pronunciation indicates that 'comfortable intelligibility' should be a satisfying result of the process of L2 acquisition. In contrast, there is the native-like pronunciation approach, which motivates L2 learners to extensively work on improving their accent. Regardless of goal-oriented progress, pronunciation learning and teaching always requires practice. Studies show that providing immediate feedback on L2 progress is, on the one hand, demanding and time-consuming, but on the other, the most beneficial for L2 learners (Lyster and Saito 2010).

However, as a result of the global pandemic which started in 2020 and, which forced people to teach and study remotely, teachers had to find other ways to improve students' language skills, including L2 pronunciation., The present study describes the level of effectiveness of both traditional and computer-assisted second language pronunciation techniques from the students' perspectives. In light of the present findings, the study provides ideas of combining traditional and computer-assisted techniques which are beneficial for learners' L2 pronunciation progress.

2. Perspectives on pronunciation teaching

Despite the fact that studies on the attitudes and beliefs of students towards their L2 pronunciation skills do not have a very long history in Poland, it is possible to notice a major trend, which has been almost unchanged since the 1980s. The first study in Poland on the attitudes of Polish students of English was conducted by Krzyżyński (1988). In his work, he attempted to present students' attitudes towards the importance of English pronunciation as compared to other elements of the English system. The results have shown that, according to the English majors in Poznań, pronunciation is of less importance than grammar or other aspects of a foreign language for overall language proficiency (Krzyżyński 1988). Sobkowiak (2002) partially confirmed Krzyżyński's findings, when he presented in his large-scale study conducted in Poznań that the majority of students (67%) did not agree with the statement that "good pronunciation is more important than grammar or vocabulary in English" (Sobkowiak 2002:183). Waniek-Klimczak (1997) presented very similar results. The findings of her study showed that English majors in Łódź chose fluency, confidence, and communication as more important than native-like pronunciation (Waniek-Klimczak 1997). By comparing the views of English and non-English majors, Waniek-Klimczak and Klimczak (2005) proved that it was the group of English majors who believed that it was possible to acquire native-like accent, although both groups claimed they would like to speak native-like. Also, the results obtained by Waniek-Klimczak et al. (2015) support the idea that a vast majority of Polish students of English want their pronunciation to be correct and they would like to speak native-like.

The multitude of data presented by numerous researchers (Celce-Murcia and Goodwin 1991, Chen 2007, Hişmanoğlu 2006, Hişmanoğlu and Hişmanoğlu 2010) demonstrate the existence of three core themes in foreign language pronunciation teaching: (1) intuitive-imitative, (2) analytic-linguistic, and (3) integrative.

The invention of the language laboratory along with the audio-lingual methods popular from the 1960s to the 1980s shifted the focus of pronunciation teaching onto learner's listening and imitating abilities and thus, gave rise to the intuitive-imitative trend. As explained by Celce-Murcia et al. (1996:10-13), this perspective focuses on the learner's ability to imitate the rhythms and sounds of the second language. It aims to achieve an acceptable threshold of articulation without the explicit intervention of any instruction. To achieve this goal, teachers use CDs, videos, and online resources (Carey 2002:1, Hişmanoğlu 2006:105).

In the analytic-linguistic style, learners are provided with explicit information on pronunciation. This method, which sprung into prominence in the latter half of the century, is mainly based on the following pedagogical aids used in pronunciation instruction: phonemic and vocal charts, phonetic alphabet, prosodyrelated and practical exercises (i.e. minimal pair drills, rhythmic chants) (Carey 2002:1, Hashemian and Fadaei 2011:969).

The integrative trend in teaching is defined by Lee (2008:1) as one that does not consider pronunciation as an isolated drill or sub-ability, but rather an integral component of communication. In this method, teaching pronunciation is connected with fulfilling a particular learner's need by meaningful task-based practices, such as listening activities oriented toward pronunciation learning as well as suprasegmentals such as stress, intonation and rhythm. The latter is developed through the use of extended discourse beyond the level of a word or phoneme (Hiṣmanoğlu and Hiṣmanoğlu 2010:984-985).

While pronunciation and the vital role it plays in communication have been taught from many different perspectives and with the use of numerous approaches, there has been a significant shift in teaching methods in 2020 due to the coronavirus pandemic,. Even though the concept of computer-assisted pedagogy is nothing new for many researchers (Rogerson-Revell 2021) and its importance in second language pronunciation teaching has been recognized in empirical studies (Waltens and de Bot 1984; Schwartz et al. 1991; Ehsani and Knodt 1998), it has now become an unavoidable part of the e-learning process. Indeed, access to virtually unlimited input together with instantaneous feedback have given rise to many computer-assisted methods in pronunciation teaching.

3. Selected second language pronunciation techniques

A significant body of research over the last few decades has attempted to investigate students' attitudes and preferences concerning pronunciation teaching and learning techniques (Derwing and Rossiter 2002, Timmis 2002, Couper 2003,

Derwing 2003, Gatbonton et al. 2005, Scales et al. 2006, Kang 2010). For instance, Derwing and Rossiter (2002: 155-156) examined the perceptions of 100 adult learners of English in terms of their pronunciation difficulties and the strategies they use when they are faced with communication breakdown. The results have shown that 56% of all the participants of the study reported paraphrase as the most favourite strategy. Self-repetition (28%) was their second option, followed by such strategies as writing/spelling (7%), volume adjustment (5%), speaking clearly (3%), and slowing speech rate (3%) (Derwing and Rossiter 2002: 159-160).

In her other work, Derwing (2003: 547) interviewed 100 intermediate proficiency ESL adult students to analyse their perceptions of their own pronunciation struggles. She also paid attention to the consequences of speaking with a foreign accent. The results have shown that over 50% of participants of the study were aware that their pronunciation led to the problems in communication. Yet, the respondents were not able to indicate what were the exact difficulties with their pronunciation. Two thirds of adult students said that they were not discriminated due to their accent, however, the majority admitted that they would be more respected if their pronunciation of English was better.

Following that, Timmis (2002: 240) conducted two parallel questionnaire surveys focusing on L2 pronunciation and grammar, in which almost 600 students and teachers from over 45 countries participated. Although the author admitted that it would be absurd to claim that the results of his research provided 'a statistically accurate picture' (Timmis 2002: 248), most of the students showed that there is still some desire to achieve native-like pronunciation. On the other hand, teachers were more tend to regard 'accented intelligibility' as the most desirable goal, yet there was still a belief that native-like pronunciation should be 'the benchmark of perfection'.

Scales *et al.* (2006: 715) analysed L2 learners' perceptions of accent in a group of 47 people (37 English language learners and 10 American undergraduate students). The participants' tasks were to identify various accents (General American, British English, Chinese English, and Mexican English), and state their preferences about them. 62% of the respondents admitted that their main aim was to sound native-like, however, only 29% identified the American accent correctly. Moreover, there were no strong correlations between the amount of time spent in an English speaking country or studying English and the ability to identify accents correctly. However, a strong correlation was found between the most preferable accent and its level of understanding.

Kang (2010: 105) analysed adult L2 learners' perspectives and expectations of the pronunciation lessons they attended. Among 238 ESL students from New Zealand and the US, 93% of the respondents admitted that pronunciation is one of the most crucial aspects in successful communication. The results of the study have also revealed that ESL teachers' English models play an important role in shaping L2 learners' perspectives on learning L2 pronunciation (Kang 2010: 113).

In the age of distance learning, L2 pronunciation methods and their effectiveness have still remained largely unexplored. In particular, the field lacks insights gathered from in-depth analysis into which methods are the most effective motivating factors for students in the context of learning and teaching L2 pronunciation.

Baker (2014), on the basis of Brown's (2007: 184) classification, presents three categories of second language pronunciation techniques, i.e. controlled, guided and free. To date, this is the most common and most recognisable classification of learning and teaching methods in the process of second language acquisition. Controlled activities require highly arranged actions in which the teacher has a dominant role and as a result, students' answers are strongly predicted (e.g. review, testing, repetition drill, explanation and examples or listening text presentations, minimal pair practice). As for guided or semi-controlled activities, in which the teacher's control is of less importance, Baker (2014) distinguishes such techniques as question-answer referential, audio recognition, students' feedback practice or mutual exchange. With free activities, the roles change and students become more dominant during the pronunciation practice, focusing on such tasks as drama, games, presentations or discussions, in which students frequently cooperate with other learners.

The above-mentioned classification of second language pronunciation techniques, as Brown (2007) highlights, should be noted only as a guideline, as there are many cases in which it is not possible to categorise a particular technique to a certain category. Bearing that in mind, the present study does not aim to classify L2 pronunciation methods by allocating them to the previously mentioned categories but rather attempts to examine the intricate relationships between students' knowledge, perceptions, attitudes and their most preferable practices which, in their opinion, result in improvement of their own L2 pronunciation.

4. Research questions and hypotheses

The study was guided by the following research questions:

RQ1: Which techniques, traditional or computer-assisted, do students prefer during English classes?

RQ2: Which computer-assisted technique presented in the survey is perceived to be the most beneficial among L2 learners?

Based on the previous studies and the research questions, the following hypotheses are presented:

H1: L2 learners find computer-assisted teaching pronunciation techniques more preferable than traditional methods.

H2: It is possible to combine traditional and computer-assisted second language pronunciation techniques to improve distance learning.

5. Methodology

5.1. Participants

118 students participated in this survey-based study. The subjects were Polish students of Applied Linguistics at the University of Rzeszow (97 females, 21 males) with an average age of 20 years (between 19-22). All students attended an English Phonetics and Phonology course, which was obligatory on the curriculum in the first year of Applied Linguistics. In terms of language proficiency, their English level varied from B2+ to C1 (depending on the placement test and the results of school leaving exams and practical English exams at the end of each academic year). Among the 118 respondents, 103 students declared that during their (linguistic) studies/education they would like to acquire native-like pronunciation, while 15 participants stated that they are already satisfied with their L2 pronunciation level as long as it is understood by listeners. None of the respondents admitted that pronunciation is not important for them (see Appendix A, question I).

5.2.Data gathering instrument: Questionnaire

This study collected data via a questionnaire which investigated students' most preferable L2 pronunciation techniques that they use (or would like to use) in order to improve their pronunciation skills (Appendix A). It included four main questions. Questions number two and three gathered data about the students' most preferable L2 pronunciation teaching and learning techniques, including listening, recording, drilling, transcription practice, imitation and self-imitation practice, visual feedback and theoretical background. The students were asked to create their own list, starting from the most useful to the least beneficial techniques. In question one, the participants of the study were asked to choose one of three given options about their attitude towards L2 pronunciation. They were asked whether they want to sound native-like or they are satisfied with their pronunciation. The last option was for those students who claim that pronunciation is not important, however, none of the students chose this answer. Task four was an open-ended question about techniques students find helpful in improving their English pronunciation, yet they were not mentioned in the questionnaire.

5.3.Data Analysis

In order to investigate which L2 pronunciation technique is the most preferable among L2 learners, the study is based on a questionnaire created specifically for the purpose of this research paper. The analysis of the obtained data involved a two-stage process: a) data segmentation; and b) techniques categorisation. The first step was to select pronunciation techniques in terms of their frequency of use.

Both stages were based on several sources, including Brown (2007) and Celce-Murcia et al. (2010) who present various approaches and methods of teaching pronunciation. The second stage, techniques categorisation, was based on the collected data. Hence, five categories were distinguished: (1) traditional techniques used only in the classroom, (2) traditional techniques used both in the classroom and for distance learning, (3) computer-assisted techniques used only in the classroom, (4) computer-assisted techniques used both in the classroom and for distance learning, (5) innovative techniques which combine students' needs and are available online.

Descriptive statistics were used to describe the data in this study. We used frequency distribution which refers to the quantitative analysis and summarises the frequency of values of variables presented in this study.

6. Results

The first part of this section reveals the results obtained from question two, which examined the students' preferences for pronunciation-oriented techniques used in L2 pronunciation practice during English classes. In this part of the survey, the participants were asked to create their own lists, on the basis of the given pronunciation techniques, starting from the most useful to the least effective one. There were 10 techniques presented. Figure 1 shows a description of the techniques used during English classes and students' responses i.e. their preferences.



Figure 1: The effectiveness of pronunciation improving techniques used in English classes assessed by students.

Overall, among the 118 participants, listening to recordings from textbooks for English learners was the most preferable teaching and learning pronunciation technique (31.4%), as it was the most common first choice made by the students among all of the methods given in the survey. Moreover, none of the students decided to mark it as the least useful method. 11.9% of learners decided to place it as the second most preferred option; however, it was the fourth and the sixth

places that gained higher values (14.4% and 13.6%, respectively). This may suggest that although this traditional method was the most frequent choice, there are students who consider it as a rather mediocre technique, considering that only 6.8% of participants made it their third choice, whereas 8.5% the eighth.

Immediate feedback from the teacher was most often placed second of the options given (19.5%). It should be highlighted that 15.3% of participants decided to place it on the top of the list, 16.1% made it their third choice, and 13.6% the fourth one. Only 1.7% of all students ordered it in the last position. There was only one more technique that achieved the same result, namely the repetition drill. Comparing the method of immediate feedback from the teacher to the results obtained for other techniques, it should be noted that this has the largest and most noticeable distinction between the first four places and the rest (i.e. only 0.8% of all participants of the study placed it in eighth position).

The largest number of respondents, i.e. 21.2%, listed repetition drills in fourth place, whereas 16.9% made it their third choice, 15.3% the fifth, and 13.6% the second. Similarly to the first technique (listening to recordings for L2 learners), none of the students put this method as the last one on the list.

10.2% of all students chose recording and listening as the best tool to improve their L2 pronunciation. However, a larger number of the respondents, i.e. 20.3%, decided to place it in third position, which is still relatively high.

Techniques based on simultaneous listening and reading were most commonly placed in sixth (14.4%), seventh (13.6%), third (12.7%) and fifth (12.7%) positions. Such a broad spread of students' preferences may suggest that either they do not have much experience in using it in practice or they do not find it as effective as the previously mentioned methods. Thus, it is noteworthy that only 6.8% of respondents decided to list it at the top of their list.

Transcription practice, as one of the most traditional techniques, especially in English phonetics and phonology classes, was most frequently placed in ninth position (15.3% of all respondents). Only 5.1% of students ordered it in first place.

The analysis of participants' responses has shown that listening to other students' utterances is perceived as one of the least beneficial methods in terms of L2 pronunciation progress. 5.1% of students placed it at the top of their list; however, 17.8% of all respondents claimed that it should be placed in the tenth and last position. Interestingly, 11.9% of the students put it in fifth place and 12.7% as the second option. Such inconsistency may be the result of students' various experiences in pair work, depending on individual preferences, temperament or level of extroversion.

Although self-imitation practice is one of the computer-assisted techniques that uses advanced tools and algorithms to modify the L2 learner's voice so that it can adjust it to the model native-speaker's voice, according to respondents, is one of the least effective methods. 22.9% of the students decided to place it in the last position, and only 9.3% put it at the top. The same value (9.3%) was gained in the fifth, sixth, and seventh places, whereas 3.4% of all of the students placed it in

third position. There may be numerous reasons for placing this method at the bottom of the list, starting from the fact that the students may not be familiar with such a practice. Moreover, this method requires specific tools which, although available online, might be challenging if they are not sufficiently explained by the teacher.

Displaying prosody of the utterance is another technique belonging to the group of computer-assisted L2 pronunciation progress methods which proved to be less effective than the traditional techniques. Similarly to self-imitation practice, the largest group of students, i.e. 31.4%, listed it in ninth place, whereas 15.3% (the second largest percentage value) situated it in the last position. Students' disinterest, or lack of experience, in the given method can also be noticed by looking at the values at the top of the list. Only 3.4%, 1.7% and 2.5% of students decided to put it in first, second and third positions, respectively.

Gaining a theoretical background about English phonetics and phonology was the least popular with the students, with 29.7% placing it last and options eight and nine also achieved the high values, i.e. 18.6% and 19.5%, respectively. Only 4.2% of all respondents placed it at the top of their list, and 10.2% made it their sixth choice

The main aim of the third question in the questionnaire was to find out about students' preferences for the L2 pronunciation techniques that they use as self-development tools outside English classes. The results are presented in Figure 2 below.



Figure 2: The effectiveness of pronunciation improving techniques outside English classes assessed by students.

Among six categories distinguished in this part of the survey, listening to English native speakers proved to be the most influential method in L2 pronunciation progress (28% of all respondents). 24.6% of students listed it in second place, whereas only 1.7% ordered it in last position. Another very frequently chosen technique was 'conversations with English native speakers'. It was placed in first and third positions by 24.6% of students, whereas 19.5% gave it second place. Only 3.4% of all participants put it in last position. The next method, i.e. visiting an English-speaking country, was put in first place by a plurality of the students (22%), yet it should be emphasised that all of the possible options gained relatively large values, i.e. 16.1%, 15.3%, 11.9%, 16.1%, and

18.6% for second, third, fourth, fifth, and sixth positions, respectively. Considering the fact that there was a small difference (only 3.4%) between the first and the last position, it is difficult to conclude whether, according to students' preferences the given method should be considered as effective as the alreadymentioned techniques.

In a similar vein, a relatively small number of respondents (8.5%) valued most highly the idea of listening to authentic English (e.g. radio, podcasts, audio books). The largest groups of students placed it in either third (21.2%), fourth (25.4%) or fifth (20.3%) position, which seems to be inconsistent with the results for a somewhat similar method, i.e. listening to English native speakers. In this context, watching English films/videos (Netflix, HBO, YouTube, etc.) emerges as a more effective technique, gaining 14.4% of respondents' votes as the first option. Most of the students decided that it should come further down the list, as 23.7% of them placed it in fifth position.

According to the respondents, the least recommended method was reading in English, as almost 62% of all of the students placed it in last position and only 2.5% put it at the top of the list. Given the results obtained from the previously mentioned techniques, where the most preferable options focused on listening skills, it should not come as a surprise that reading practice was not perceived as an effective method for L2 pronunciation progress.

Looking across Figure 1 and Figure 2, the data did not generally differ. The survey revealed that the choice of techniques for improving listening comprehension is in line with the respondents' view of L2 pronunciation improvement, thus such techniques as listening or conversing with English native speakers were considered to be the most effective.

The analysis of the final open-ended question reports on the students' individual suggestions regarding L2 pronunciation techniques and their effectiveness. According to the survey results, the largest number of respondents, that is 39%, recommended methods such as listening to L2 music while reading lyrics and singing, reading books and articles (15%), repetition/shadowing methods (9%), tongue twisters (9%), a trip abroad (9%) online conversations with English native-speakers (7%), using pronunciation apps on a daily-basis (5%), studying online with a tutor from and English-speaking country (4%), joining Facebook groups about language learning (3%). Since these individuals constitute the largest group of the total sample, it might be inferred that exposure to L2 could be regarded as a relevant factor in choosing a particular pronunciation technique.

According to the respondents, there is also a noteworthy impact on the way one pronounces utterances linked directly to the use of online resources and speaking practice. 27% of study participants recommended using the Internet to develop one's pronunciation skills by watching movies/series with subtitles, listening to podcasts, playing video games, using applications and pronunciation-oriented dictionaries. The significance of speaking was noted by 20% of

respondents who pointed out that conversation with teachers, native speakers, friends or even talking to oneself may help to improve articulation.

Yet another important insight emerging from the data collected is the prominent role of feedback. 7% of the respondents value individualized and instantaneous information on pronunciation errors provided either by a peer or a teacher. Some of the students perceived the speech recording method accompanied by their own error analysis as an effective method of practicing proper articulation. Likewise, 7% of the respondents claimed that being systematic, choosing interesting content, trying to think in English and surrounding oneself with English are the core determiners of pronunciation improvement.

7. Discussion

The study has examined students' preferences of L2 pronunciation techniques, with a focus on their usefulness on pronunciation improvement. In answer to the first research question, one of the main findings is that traditional (and controlled) techniques, including listening and a teacher's immediate feedback are preferred techniques. In terms of computer-assisted techniques, self-imitation practice appears to have been chosen more frequently than display of prosody of the students' utterances. As for L2 pronunciation techniques used outside English classes, listening and conversing with English native-speakers received the largest number of the participants' responses.

The findings have demonstrated that students find traditional, controlled techniques more useful than modern approaches. This leads us to reject our first hypothesis; however, it also shows that, to a certain degree, controlled methods are still preferred tools in L2 pronunciation improvement. The findings of this study concur with other research (e.g. Couper 2003; Derwing *et al.* 1998) which showed that controlled techniques can bring positive effects on L2 learners' intelligibility. Baker (2014: 153), who focuses on teachers' preferences in terms of pronunciation practice, also demonstrated that controlled techniques dominated other techniques that teachers know and use. It should then come as no surprise that students' preferences and expectations are similar.

After analysing students' responses, 5 categories of pronunciation practice were distinguished: (1) traditional and used only in the classroom, (2) traditional but also used in distance learning, (3) computer-assisted but used only in the classroom, (4) computer-assisted and also used in distance learning, (5) innovative: combining students' needs and available online. The results of this study demonstrate that there is only one technique, i.e. transcription practice, that suits the first category (traditional method used only in the classroom). As for the second group (traditional techniques also used in distance learning), there are such methods as listening to recordings from textbooks for English learners, repetition drills, recording and listening to the learner's own voice, simultaneous listening

and reading or a teacher's immediate feedback. Following that, no techniques were matched to the third group, which described computer-assisted methods that can be used only in the classroom. Self-imitation practice and display of L2 learners' prosody were categorised as computer-assisted methods that can be used either in the classroom or in distance learning. The first is a method based on listening and repeating students' own utterances which were recorded and then modified by specific algorithms to adjust intonation, speech rate and syllable durations to sound like a native-speaker's utterance (De Meo et al. 2013, Felps et al. 2009). The latter is a technique in which students receive visual feedback on the differences between their prosody and that of a native speaker's reading (Hirst 2000, 2012, 2015).

This enables us to combine the above-mentioned traditional and computer-assisted techniques and create a new category that meets the students' needs in the era of e-learning. Our proposal also considers students' responses to the open-ended question, in which L2 learners highlighted the importance of immediate feedback, listening to and repeating a native speaker model.

All of the above leads us to the idea of using innovative L2 pronunciation techniques that combine immediate feedback with listening and imitation practice. Thus, we suggest English teachers and students of English use such tools as Praat (Boersma and Weenink 2007), ProZed plugin (Hirst 2015), or a recently-developed interactive tool for pronunciation training, i.e. Golden Speaker Builder, which allows L2 learners to generate a personalised voice that mirrors their own but with a native accent (Ding et al. 2019). Accordingly, speech visualisations based on displaying prosody of the utterances are another option that may improve learners' L2 pronunciation (Hirst 2015).

Finally, considering the results obtained from the third question, in which students were asked to provide their most favourable pronunciation technique used outside English classes, we suggest English teachers adapt presently available mainstream technology to match the pedagogical requirements, including an interdisciplinary approach based on tasks that stimulate all of the senses, immerse students in real-life situations that they are particularly likely to experience (e.g. authentic materials, Netflix based activities). An example of the use of authentic materials is the analysis of fragments from the most popular series in terms of the accents of individual actors. The cult series, *Stranger Things*, and the lead actress Millie Brown is of British descent, but in the series she uses an American accent, which she acquired by watching American films and series. Analysing her speech in British and American English, showing the differences at the segmental and suprasegmental level using Praat is one example of how authentic materials and traditional techniques, e.g. shadowing, can be used.

8. Implications and conclusions

The review of students' preferences with regard to L2 pronunciation techniques implies that traditional methods such as listening to the recordings from textbooks for English learners, shadowing, or teachers' immediate feedback are the most preferable ones. The results of the study reveal that among 5 categories that were distinguished, traditional (controlled and guided) techniques which can also be used in distance learning were most commonly used by the students in L2 pronunciation practice. Whether students were given a choice or asked to give their own suggestions of L2 pronunciation techniques, the methods they mentioned belonged to the traditional group, including listening, simultaneous listening and reading, shadowing, or talking with native speakers of English. Earlier research (Baker 2014) shows that traditional methods dominate in teachers' group. The question that arises here is to what extent students' preferences are dependent on teachers' views.

Native-like pronunciation is a skill that requires time, consistency and extensive practice, especially for those students who are not naturally gifted at acquiring the prosody of a foreign language. The presented methods take into consideration the research findings and attempt to combine traditional and modern approaches so that they give L2 learners an opportunity to improve their pronunciation in a stress-free environment, whenever possible, at their own time and pace. Moreover, they derive benefits from those aspects that were pointed out by the students as the most effective methods, e.g. listening, conversing, imitating or receiving immediate feedback. Both classroom-based and computer-assisted techniques offer a large and, most importantly, in most cases free variety of pronunciation techniques which can be easily adjusted to individual work on pronunciation progress. Following that, individual work with the use of preferable tools may contribute to more consistent practice, and greater effects.

References

Baker, Amanda. 2014. Exploring Teachers' Knowledge of Second Language Pronunciation Techniques: Teacher Cognitions, Observed Classroom Practices, and Student Perceptions. *TESOL Quarterly*, 48(1), 136-163. [Accessed 20 October 2020]. Available at http://www.jstor.org/stable/43267952 https://doi.org/10.1002/tesq.99

Boersma, P., Weenink, D. 2007. Praat: doing phonetics by computer [Computer program]. Version 6.1.53, retrieved 8 September 2021 from http://www.praat.org/

Brown, Douglas. 2007. *Teaching by principles: An interactive approach to language pedagogy* (3rd ed.). White Plains, NY: Pearson Education.

Carey, Michael. 2002. An L1-specific CALL pedagogy for the instruction of pronunciation with Korean learners of English. Macquarie: Macquarie University.

Celce-Murcia, Marianne, Brinton, Donna, Goodwin, Janet, and Griner, B. 2010. *Teaching pronunciation:* A reference for teachers of English to speakers of other languages (2nd ed.). Cambridge, England: Cambridge University Press.

- Celce-Murcia, Marianne, Brinton, Donna, and Goodwin, Janet. 1996. *Teaching pronunciation: A Reference for Teachers of English to Speakers of Other Languages*. Cambriznaadge: Cambridge University Press.
- Celce-Murcia, Marianne, and Goodwin, Janet. 1991. Teaching Pronunciation. In M. Celce-Murcia, (ed.), *Teaching English as a Second or Foreign Language*, 136-153. Boston: Heinle & Heinle Publishers.
- Chen, C. F. 2007. Computer assisted language learning and teaching. [Accessed 15 October 2020] Available at: http://www.nkfust.edu.tw/~emchen/CALL/
- Couper, G. 2003. The value of an explicit pronunciation syllabus in ESOL teaching. *Prospect*, 18(3), 53-70.
- De Meo, A., Vitale, M., Pettorino, M., Cutugno, F., and Origlia, A. 2013. Imitation/self-imitation in computer-assisted prosody training for Chinese learners of L2 Italian. In J. Levis, K. Levelle, (eds.), *Proceedings of the 4th Pronunciation in Second Language Learning and Teaching Conference*, 90-100. Ames, IA: Iowa State University.
- Derwing, Tracey, and Rossiter, Marian J. 2002. ESL learners' perceptions of their pronunciation needs and strategies. *System*, vol. 30, 155-166. https://doi.org/10.1016/S0346-251X(02)00012-X
- Derwing, Tracey. 2003. What do ESL students say about their accents? *Canadian Modern Language Review*, vol. 59, 547-566. https://doi.org/10.3138/cmlr.59.4.547
- Derwing, Tracey M., Munro, Murray J., and Wiebe, Grace. 1998. Evidence in favor of a broad framework for pronunciation instruction. *Language Learning*,48, 393–410. https://doi.org/10.1111/0023-8333.00047
- Ding, S., Liberatore, C., Sonsaat, S., Lučić, I., Silpachai, A., Zhao, G., Chukharev-Hudilainen, E., Levis, J., Gutierrez-Osuna, R. 2019. Golden speaker builder–An interactive tool for pronunciation training. Speech Communication, 115, 51-66.
- Ehsani, F., and Knodt, E. 1998. Speech technology in computer-aid learning: Strengths and limitations of a new CALL paradigm. *Language Learning and Technology*, 2, 45-60. Available at: http://llt.msu.edu/vol2num1/article3/index.html.
- Felps, Daniel, Bortfeld, Heather, and Gutierrez-Osuna, Ricardo. 2009. Foreign accent conversion in computer assisted pronunciation training. *Speech Communication*, 51(10), 920-932. https://doi.org/10.2307/3588491
- Gatbonton, Elizabeth, Tromfimovich, Pavel, and Magid, Michael. 2005. Learners' ethnic group affiliation and L2 pronunciation accuracy: A sociolinguistic investigation. *TESOL Quarterly*, vol. 39, 489-512. https://doi.org/10.2307/3588491
- Hashemian, Mahmood, and Fadaei, Batool. 2011. A Comparative Study of Intuitive-imitative and Analytic-linguistic Approaches towards Teaching English Vowels to L2 Learners. *Journal of Language Teaching and Research*, 2(5), 969-976. https://doi.org/10.4304/jltr.2.5.969-976
- Hirst, D. 2000. ProZed: A multilingual prosody editor for speech synthesis. Proceedings of IEE Colloqium. State-of-the-Art in Speech Synthesis. London, March 2000 https://doi. 10.1049/ic:20000321 https://doi.org/10.1049/ic:20000321
- Hirst, D. 2012. ProZed: A speech prosody analysis-by-synthesis tool for linguists. SP-2012, 15-18.
 Hirst, D. 2015. ProZed: A Speech Prosody Editor for Linguists, Using Analysis-by-Synthesis. In K.
 Hirose, J. Tao, (eds.), Speech Prosody in Speech Synthesis: Modeling and generation of prosody for high quality and flexible speech synthesis. Prosody, Phonology and Phonetics. Springer, Berlin, Heidelberg. [Accessed 10 October 2020] https://doi.org/10.1007/978-3-662-45258-5_1
- Hismanoglu, Murat. 2006. Current Perspectives on Pronunciation Learning and Teaching. *Journal of Language and Linguistic Studies*, 2(1), 100-110.
- Hismanoglu, Murat, and Hismanoglu, Sibel. 2010. Language teachers' preferences of pronunciation teaching techniques: traditional or modern? Procedia: *Social and Behavioral Sciences*, 2, 983-989. https://doi.org/10.1016/j.sbspro.2010.03.138

- Kang, Okim. 2010. ESL learners' attitudes toward pronunciation instruction. In J. Levis, K. Levelle, (eds.), Proceedings of the 1st Pronunciation in Second Language Learning and Teaching Conference, 105-118. Ames: Iowa State University.
- Krzyżyński, Janusz. 1988. Folk linguistics and its influence on the attitudes and motivation of learners of English as a foreign language. *Glottodidactica*, 19, 107-113.
- Lee, S. T. 2008. Teaching pronunciation of English using computer assisted learning software: An active research study in an institute of technology in Taiwan. Australia: Australian Catholic University.
- Lyster, Roy, and Saito, Kazuya. 2010. Oral feedback in classroom SLA. *Studies in Second Language Acquisition*, 32, 265-302. https://doi:10.1017/S0272263109990520
- Scales, J., Wennerstrom, A., Richard, D., Wu, S. H. 2006. Language learners' perceptions of accent. TESOL Quarterly, 40, 715-738. https://doi.org/10.2307/40264305
- Sobkowiak, Włodzimierz. 2002. English speech in Polish eyes: What university students think about English pronunciation teaching and learning. In E. Waniek-Klimczak, and J. P. Melia (eds.), *Accents and speech in teaching English phonetics and phonology: EFL perspective*, 177-196. Frankfurt: Peter Lang.
- Schwartz, A., Markoff, J., and Jain, N. 1991. Intensive instruction for accent modification. [Accessed 15 October 2020].
- Timmis, Ivor. 2002. Native-speaker norms and international English: A classroom view. *ELT Journal*, 56, 240-249. https://doi:10.1093/elt/56.3.240
- Waltens, B., and De Bot, K. 1984. Visual feedback of intonation II: Feedback delay and quality of feedback. *Language and Speech*, 27, 79-88. https://doi.org/10.1177/002383098402700106
- Waniek-Klimczak, Ewa. 1997. Context for teaching English phonetics and phonology at Polish Universities and Colleges: a survey. In E. Waniek-Klimczak (ed.), *Teaching English phonetics and phonology II: Accents '97*, 5-17. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Waniek-Klimczak, Ewa, and Klimczak, Karol. 2005. Target in speech development: learners' views. In K. Dziubalska-Kolaczyk, & J. Przedlacka (eds.), *English pronunciation Models: A changing scene*, 229-250. Bern: Peter Lang.
- Waniek-Klimczak, Ewa, Porzuczek, Arkadiusz, and Rojczyk, Andrzej. 2015. 'Polglish' in Polish Eyes: What English Studies Majors Think About Their Pronunciation in English. In E. Waniek-Klimczak, M. Pawlak (eds.), *Teaching and Researching the Pronunciation of English. Second Language Learning and Teaching*. Springer. https://doi.org/10.1007/978-3-319-11092-9_2

Appendices

Appendix A

Survey/Questionnaire

I Which statement is true for you? Please choose the one with which you agree the most.

- 1. I would like to acquire native-like pronunciation
- 2. The way I pronounce English structures is not important for me as long as I am understood by the listeners
- 3. Pronunciation is not important for me.

II Which of the following techniques contributed (or may contribute) to improving your English pronunciation most during English classes? Give each method points from 1 (the least useful) to 10 (the most useful).

1. Listening to the recordings from textbooks for English learners

- 2. Listening to other students' utterances
- 3. Recording and listening to your own voice
- 4. Repetition Drill (repeating confusing/challenging words/phrases)
- 5. Simultaneous listening and reading the same text
- 6. Teacher's immediate feedback on your pronunciation
- 7. Transcription practice
- Gaining theoretical background about English phonetics and phonology
- 9. Self-imitation practice (listening and repeating your own voice modified by specific algorithms to sound native-like)
- 10. Displaying prosody of the utterances (students receive visual feedback on the differences between their prosody and that of native speaker's reading)

III Which of the following techniques contributed (or may contribute) to improving your English pronunciation most outside English classes? Give each method points from 1 (the least useful) to 10 (the most useful).

- 1. Listening to English native-speakers
- 2. Conversations with English native speakers
- 3. Visiting English speaking country
- 4. Listening to authentic English (e.g. radio, podcasts, audiobooks)
- 5. Watching English films/videos (Netflix, HBO, YouTube, etc.)
- 6. Reading in English (books, articles, etc.)

IV Are there any other techniques you find helpful in improving your English pronunciation? Please name them.