(Dörnyei, 1998).

This app is arguably among one of the education-related apps with few flaws, and MacMillan hails it as "the ultimate mobile English pronunciation aid for students and teachers". Nevertheless, two Iranian EFL learners experienced some display problems on different Android platforms. Also, as intermediate-level students, they wished they could eliminate some very easy and basic words from their wordlists. or even add some others, so they could have more trimmed and user-specific lists. They also emphasized the need for some visual and pictorial aids to show the place of articulation and mouth movements to further help accurate pronunciation.

In addition, adding the pronunciation of example sentences to the database would be of great help as users can hear the words in fluent speech. Unfortunately, connected speech and how words are pronounced when in larger units of discourse have been largely neglected in this app. This is a serious drawback as rarely do learners use and pronounce words in isolation.

Regarding the segmental and suprasegmental aspects, this app fails to address some elements like intonation, connected speech, and sentence stress. It seems that adding these to another update of this app can make it more comprehensive and educationally useful. It would, then, be especially useful for English learners in EFL settings. It would also be helpful if other accents, like Australian, were added to the application.

4. Conclusion

Winner of the prestigious British Council ELTons Award 2012 for Innovation in Learner Resources, this app makes for a quite thorough, innovative, and easy to use tool to master American and/or British pronunciation. It proves to be a useful and rather comprehensive medium for both learners and instructors of the English language, and despite its few shortcomings, fills a technological void in the realm of pronunciation. All in all, this application is a great way to have the English language phonemes etched into our brains.

References

- Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994–2012. *Language Learning & Technology*, 17(3), 157–224.
- Celce-Murcia, M., Brinton, D. M., & Goodwin, J., M. (with Griner, B.) (2010). *Teaching pronunciation: A Course book and reference guide,* New York, NY: Cambridge University Press.
- Chapelle, C. A. (2007). Technology and second language acquisition. *Annual Review of Applied Linguistics*, 27, 98–114. doi:10.1017/S0267190508070050.
- Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, 39, 379-397.
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31, 117-135.
- Jenkins, J. (2002). A sociolinguistically-based, empiricallyresearched pronunciation syllabus for English as an international language. *Applied Linguistics*, 23, 83-103.
- Larsen-Freeman, D., & Anderson, M. (2011). Techniques and principles in language teaching (3rd ed.). Oxford: Oxford University Press.
- Levis, J. (2007). Computer technology in teaching and researching pronunciation. *Annual Review of Applied Linguistics*, 27, 184–202.
- Morley, J. (1991). The pronunciation component in teaching English to speakers of other Languages. *TESOL Quarterly*, 25(3), 481.
- Otto, B. W. (in press 2017). From past to present: A hundred years of technology for L2 learning. In Chapelle, C.A., & Sauro, S. (Eds.), *The handbook of technology in second language teaching and learning*. MA. Wiley-Blackwell.
- Reinders, H. & White, C. (2011). Learner autonomy and new learning environments. *Journal of language learning and technology*, 15(3), 1-3.
- Seferoğlu, G. (2005). Improving students' pronunciation through accent reduction software. *British Journal of Educational Technology*, 36, 303–316.
- Stanley, G. (2013). Language learning with technology: Ideas for integrating technology in the classroom. Cambridge, UK: Cambridge University Press.
- Szyszka, M. (2016). English pronunciation teaching at different educational levels: Insights into teachers' perceptions and actions. *Research in Language*, 2, 165-180. doi: 10.1515/rela-2016-0007
- Underhill, A. (2012). Sound foundations: Learning and teaching pronunciation. Oxford: Macmillan.
- Wang, C. & Winstead, L. (2016). Introduction: Foreign language education in the digital age. In C. Wang & L. Winstead (Eds.), *Handbook of research on foreign language education in the digital age* (pp. xxvii-xxxii). Hershey. PA: IGI Global. doi: 10.4018/978-1-5225-0177-0

More

This last section is mostly about the settings of this application (Figure 8).

Through this menu, users access the settings part, in which they can switch between the American and British English phonemic charts. There is also an option which when selected includes primary stress marks in the Practice and Quiz sections.

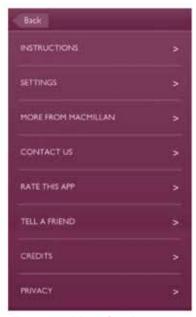


Figure 8 – More Section

3. Evaluation

Sounds: The Pronunciation App is an interactive English pronunciation tool, which can be used by both students and teachers. Created by one of the leading publishers for English learning materials, Macmillan Publishers, this application is based on the book 'Sound Foundations' by pronunciation expert Adrian Underhill. It has also incorporated his well-known phonemic charts, in a fully interactive format for both British and American English, divided into three sections: vowels, diphthongs (double vowels) and consonants.

The app is quite user-friendly and has a well-organized interface. The sections

are clearly arranged and the menus are easy to work with. Its free version is among the highest rated pronunciation apps on Google Play and iTunes. It is compatible with both smartphones and tablets which shows that the publisher has tried to reach out to a wider range of users. The premium version, which was reviewed in this paper, has a lower rating mostly due to its relatively high price.

The interactive phonemic charts featured in this app seem to be its best quality as users learn not only the sounds but also their corresponding symbols. Furthermore, the example words which appear at the top of the screen make the sounds being pronounced more comprehensible. The audio files are quite high-quality and both versions' voices are clear. Another great feature of this app is its recording option with which learners can record themselves and compare their pronunciation with the model provided by the app. It also allows comparison between the American and British pronunciation of each word.

The words on each wordlist are all among high-frequency words and clearly show how sounds may come at the beginning, middle, and end of words. The app is also quite helpful in practicing spelling while improving one's pronunciation. The option available in the Wordlist section which provides learners with the definition of the selected word is valuable as it contains parts of speech and example sentences to further clarify the meaning. This also helps with expanding learners' lexical knowledge. The scoring system in the Quiz and Practice sections is also a great way for users to keep track of their progress. This guite helps with keeping users motivated, which plays a crucial part in learning as motivation is where the drive for learning stems from

• Quiz

This section includes quizzes on the selected wordlists. These quizzes test learners' pronunciation mastery through three language skills, each having the same pattern as those in the Practice category (Figure 6a). Learners can choose from two types of quizzes: a timed one (beat the clock) with three minutes to answer the questions, or another with only three chances to answer correctly and achieving the highest score (Figure 6b).

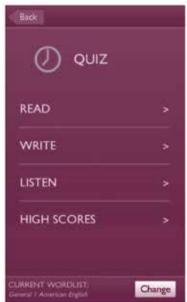


Figure 6a



Figure 6b

Types of Quizzes

More recently, and perhaps more liberatingly, mobile technologies can help with pronunciation teaching and learning as they allow for individualized instruction which can occur outside the classroom context, relieving the usual anxiety learners experience in actual language classrooms

• Learn & Teach

This section is grouped into two parts: for teachers and for students. Teachers will have access to lesson plans, tips, suggestions for teaching, and a pronunciation workshop on this app. Moreover, there are pronunciation tips and also a passage on the importance of pronunciation available for students here (Figure 7).

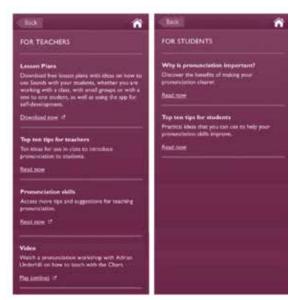


Figure 7 – Learn & Teach



Figure 3 – From left to right, the steps of the Read section



Figure 4 – From left to right, the steps of the Write section

The last one, the Listen category, follows the same first steps as the previous two – choosing up to three phonemes or a question set. However, in this part, learners will hear the pronunciation of a word and then have to type in the phonemic symbols. By clicking on either the check or show button, the correct phonemic representation and the word itself will appear (Figure 5).

These practice tests are primarily focused on transcribing words to or from phonemic script, and on listening to words and writing them in phonemic script. There is also a scoring system based on the number of correct answers. In all these exercises, the sound of that phoneme will be played by pressing each phoneme in the phonemic chart.



Figure 5 – From left to right, the steps of the Listen section

Foundations: Learning and Teaching Pronunciation (2012) and an advisor in the development of Macmillan English Dictionary. There are two representations of his charts, British and American. By tapping each phonemic symbol, its correct pronunciation will be played. Tapping and holding each phonemic symbol plays not only its sound but also an example word with that sound, which appears at the top of the screen.

Wordlist

The wordlist starts with General I with two categories to choose from. Choosing each category takes learners to a wordlist which contains the most general/frequent words in English with either American or British pronunciation. The list also includes both the pronunciation of each word and its phonemic symbols. By clicking on each word, learners can hear it read out loud. Moreover, users can switch off the sound option and instead see a pop-up window showing the word's definition. Another option available is the record button with which learners can record themselves pronouncing each word and have it played.

There are also a variety of wordlists for popular Macmillan course books available to buy. They range from elementary to advanced; and some are even topic-specific, including food and drink, sports and games, etc. Each wordlist is downloadable for \$0.99.

Practice

The next section on the list allows learners to practice the words they have worked on from each wordlist. These exercises help users practice their phonetic skills. This section is divided into three parts: Read, Write, and Listen – each enabling users to practice pronunciation

through one of these language skills (Figure 2). The words whose pronunciation are practiced are those from the wordlist learners select.

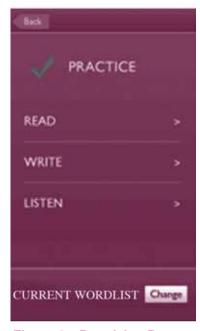




Figure 2 – Practicing Pronunciation through Language Skills

In the Read section, initially, up to three phonemes are chosen from the phonemic chart. Alternatively, learners can practice all phonemes in three question sets with 10, 25, and 50 questions. Next, a phonemic representation is shown, for which learners will have to type in its word. The correct answer is shown through pressing the check or show buttons (Figure 3).

The Write category starts the same as the previous one – by selecting up to three phonemes or the number of questions learners wish to practice. Then a word, which is derived from the initially selected list, appears at the top of the screen. Learners then proceed to type in the phonemic symbols to form the phonemic representation of the word. The correct answer is shown through pressing the check or show buttons (Figure 4).

pronunciation. Seferoğlu (2005) also suggests that technology, especially in EFL contexts where exposure to natural L2 input is rare, can provide learners with ample opportunities for practice and communicative activities in the target language. Levis (2007) goes on to add that "for any teacher who thinks that pronunciation is essential, Computer-Assisted Pronunciation Teaching (CAPT) is immensely promising" (p. 196).

More recently, and perhaps more liberatingly, mobile technologies can help with pronunciation teaching and learning as they allow for individualized instruction which can occur outside the classroom context, relieving the usual anxiety learners experience in actual language classrooms. Moreover, such devices can save classroom time to a great extent and serve as an 'assistant' to teachers (See Burston, 2013 for a review of MALL studies). In this review, we make an analogy with the term CAPT and suggest the term Mobile Assisted Pronunciation Teaching (MAPT) to refer to the application of mobile and hand-held devices such as smartphones to the task of teaching and learning pronunciation. New smartphone applications (e.g., Say It Out, Otterwave, Speech to Text) are constantly entering the market that claim to make the task of learning L2 pronunciation ever more exciting and personalized. These claims, however, should not be taken for granted as the jury is still out on the effectiveness of such technological innovations in L2 pronunciation learning and teaching. This paper puts the spotlight on one mobile pronunciation application named Sound: The Pronunciation App, published by Macmillan Publishers Ltd. and explores the possibilities it offers to learners of the English language who want to master pronunciation.

2. Description

The app is downloadable from Google Play for Android devices and iTunes for those that run iOS. Upon the first run of the app, learners are asked to choose between American English or British English. This setting can later be changed if learners wish to switch to the other pronunciation. There is, then, a list from which users can select different tasks. The list includes: 1) Chart, 2) Wordlist, 3) Practice, 4) Quiz, 5) Learn & Teach, and 6) More (See Figure 1). Each option will be explored in the following.



Figure 1 – List of Categories

There is, then, a list from which users can select different tasks. The list includes: 1) Chart, 2) Wordlist, 3) Practice, 4) Quiz, 5) Learn & Teach, and 6) More (See Figure 1). Each option will be explored in the following.

Chart

This app makes use of the interactive phonemic charts created by Adrian Underhill, the author of *Sound*

Abstract

The starting point of this paper is the recent surge in using software and mobile applications to facilitate second language learning, especially pronunciation. One such application, as reviewed in this paper, is the McMillan's pronunciation application, Sounds: The Pronunciation App. Developed upon Sound Foundations: Learning and Teaching Pronunciation (2012), a best-selling book by Adrian Underhill, it provides both learners and teachers with sound charts, audios, wordlists, and ample opportunities to practice pronunciation through some language skills, namely, listening, reading, and writing. In addition to suggesting the term Mobile Assisted Pronunciation Teaching (MAPT), this review paper attempts to have a critical look at Sounds, starting with a descriptive account of the app, followed by evaluation and empirical reports from some Iranian EFL instructors and learners. Its merits and demerits are enumerated and some suggestions are put forward to make the app more useful and educationally effective.

Key Words: Mobile application, pronunciation, second Language, technology

1. Introduction

In a world where technology is changing almost every aspect of our life, second language (L2) education cannot remain unaffected by technological developments (Chapelle, 2007; Otto, 2017, Stanley, 2013 Wang & Winstead, 2016). L2 instruction now transcends the walls of classrooms and is no longer confined to paper textbooks and black/whiteboards. On the contributions of technology to L2 learning, Larsen-Freeman and Anderson (2011) state that technology facilitates that process in two significant ways – not only does it offer learners a wide variety of instructional sources such as podcasts and online dictionaries, but it also provides more and easier access to the target language and allows them to choose their learning pace, level, and even location. Similarly, Reinders and White (2011) maintain that "technology has the potential to not only provide access to resources for learning in a superficial sense, but also to offer increased affordances for autonomous learning. Opportunities for interaction, situated learning, and support for learning outside formal contexts, have

greatly improved because of technology," (p. 1).

One of the areas of L2 learning and teaching which can benefit from technological innovations is pronunciation. As an integral part of L2 speaking ability, intelligible pronunciation seems to be among the more serious challenges learners may face since, unlike vocabulary and grammar, the speaking skill involves cognitive, affective, and psychomotor domains (Celce-Murcia, Brinton & Goodwin, 2010). It is also one of the most challenging skills for L2 teachers as many are not trained to teach it (Derwing & Munro, 2005; Jenkins, 2002; Szyszka, 2016). Derwing and Munro (2005, p. 389) maintain "Other aspects of pedagogy receive extensive attention in teacher preparation courses and materials, but in many instances L2 instructors are apparently left to teach themselves how to address pronunciation with their students." Technology, however, may assist in this regard. It can provide learners with exposure to native pronunciation which in turn may contribute to faster and easier acquisition of standard

(Application details)

Publisher	Macmillan Publishers Ltd.	Operating Systems	Android/iOS
			Smartphone
Product Type	Smartphone Application	Hardware Requirements	Internet Connection
Language(s)	English – Monolingual	Additional Requirements	None
Level	Any	Supplementary Software	None
Media Format	APK/IPA	Price	\$6.27 on Google Play \$5.99 on iTunes

چکیده

مقالهٔ حاضر با بحث در مورد افزایش ناگهانی استفاده از نرمافزارها و اپلیکیشنهای تسهیل گر یادگیری زبان در تلفنِ همراه، با تأکید بر تلفظ آغاز می شود. اپلیکیشن تلفظ مکمیلان، Sounds: The Pronunciation App، که در این نوشتار به بررسی آن خواهیم پرداخت یکی از این اپلیکیشنها است. این فناوری که بر پایهٔ کتاب پرفروش ایدرین آندرهیل، به نام Foundations طراحی شده است، [امکاناتی از قبیل] نمودارهای آوایی، فایلهای صوتی، فهرستهای کلمه، و فرصتهای فراوان برای تمرین تلفظ از طریق سه مهارت زبانی شنیدن، خواندن، و نوشتن را در اختیار مدرسان و زبان آموزان قرار می دهد. در این مقاله تلاش شده است علاوه بر پیشنهاد اصطلاح ,(MAPT) Mobile Assisted Pronunciation Teaching استفاده مفیدتر و بیان تجربهٔ چند زبان آموز و مدرس ایرانی زبان انگلیسی از کار با آن، از منظری انتقادی مدر توصیف و ارزیابی اپلیکیشن مذکور و بیان تجربهٔ چند زبان آموز و مدرس ایرانی زبان انگلیسی برای استفادهٔ مفیدتر و به لحاظ آموزشی موثر تر از آن، دیگر هدف مقالهٔ حاضر است.

كليدواژهها: نرمافزار موبايل، تلفظ، زبان دوم، تكنولوژي