cogent
education

CURRICULUM & TEACHING STUDIES | RESEARCH ARTICLE

The effectiveness of social media network telegram in teaching English language pronunciation to Iranian EFL learners

Ismail Xodabande[1]*

Abstract: In recent years, the expansion of digital technologies, multimedia, and social networks, dramatically transformed our lives. Education in general and the area of foreign language teaching and learning have also benefited hugely from those developments and advances. As a result, the face of language learning is changing and new technologies provide language learners and teachers with tools and opportunities unimaginable before. Current study examined the effectiveness of using social media network Telegram® in teaching English language pronunciation to Iranian EFL learners. Participants of this study included 30 Iranian EFL learners (in two experimental ($N = 14$) and control ($N = 16$) groups) who received different treatments over the four weeks. The results of pre-test and post-test revealed that the pronunciation of participants in experimental group improved significantly compared to control group but we found no significant improvement in pronunciation of participants in experimental group from post-test to delayed test which was administered four weeks later. The results of current study revealed that using social media networks in teaching language features can be very effective and promising.

Subjects: Applied Linguistics; English Language; Language Teaching & Learning; English

Keywords: pronunciation teaching; social media networks in language teaching; digital technologies and language learning; computer-assisted language learning (CALL)

1. Introduction
In twenty-first century, the expansion and availability of digital technologies, multimedia and social media networks, have transformed our lives dramatically and "our cumulative experience with

ABOUT THE AUTHOR
Ismail Xodabande is an MA holder of TEFL from Guilan University, currently teaching English as a foreign language in Tehran. He is interested in doing research on L2 learning motivation, materials development for language teaching, and digital technologies in language learning and teaching.

Ismail Xodabande

PUBLIC INTEREST STATEMENT
Pronunciation is one of the challenging aspects of language teaching and learning which plays a very important role in successful communication. The main goal of current study was to examine the possibility of teaching correct pronunciation of some commonly mispronounced English words by foreign language learners using a locally popular social media network. Two groups of learners participated in the study, receiving different materials over the four weeks. Statistical analysis of data revealed that the use of social media contributed significantly to improvements in participants' pronunciation in experimental group. On implication side, the paper discusses some benefits of using social media for teaching pronunciation.

cogent••oa

communication technologies has gradually altered behavioral and social norms" (Baron, 2008, p. 4). Today, every individual in the society has access to a huge amount of information which was unimaginable some years ago, and "mobile technologies offer a new paradigm in connectivity, communication, and collaboration in our everyday lives" (McQuiggan, Kosturko, McQuiggan, & Sabourin, 2015, p. 7). According to Kaplan and Haenlein (2010), "Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (p. 61). Despite the fact that these new forms of communication are very attractive to language teachers, learners, and language learning materials producers, their use in language learning and teaching is controversial and there is a lack of evidence on whether and how they can promote language learning (Zourou & Lamy, 2013).

Since the process of learning a second language (additional languages in general) is highly time-consuming and requires large amounts of input and interaction (Blake, 2008), incorporating digital technologies in language teaching and learning is necessary and even essential. Technological innovations if used properly, can enhance learners' interests and motivation, facilitate students' access to target language input, provide them with more interaction opportunities and feedback and also give the instructors the tools they need to organize course content (Golonka, Bowles, Frank, Richardson, & Freynik, 2014). Nowadays, the internet, technology, and the media, and the use of English in virtual social networks, provide language learners with greater opportunities for meaningful and authentic language use than are available in the classroom (Richards, 2015). Technological advances and developments in areas such as electronic dictionaries, internet, social media networks, speech recognition technologies, visual displays of features of language production (such as pitch), have provided foreign language learners with tools to practice and improve their pronunciation autonomously and outside the walls of the classroom.

Sometimes referred to as the "Cinderella" of foreign language teaching, pronunciation comprises the production and perception of "segmental sounds", "stressed and unstressed syllables", and "intonation" (Seidlhofer, 2001). The teaching of pronunciation has undergone some changes over the past years and it has progressed from the heydays of audiolingualism associated with habit formation, drills, and strict error correction, through periods of disappearance from the language classroom (with the decline of behaviorism and structural linguistics and of advent of CLT), to the contemporary approaches that prioritize and give more attention to the segmental and suprasegmental features within their discourse contexts (Hardison, 2009; Murphy, 2003; Seidlhofer, 2001). In recent years, however, the importance of pronunciation is growing in language pedagogy because of its central roles in speech recognition, speech perception, and speaker identity (Levis, 2007).

The primary goal of current study is to investigate the effectiveness of social media network Telegram® in teaching pronunciation to Iranian EFL learners. This social media network is highly popular in Iran and allows users to create groups with many members (up to 5,000), broadcast to unlimited numbers of people on public channels, and can be used across multiple platforms simultaneously (What can you do with Telegram?, n.d.). Given the fact that, Twitter, YouTube, and Facebook are among many sites blocked by the authorities in Iran, language teachers, and learners can use Telegram for language learning purposes and share a variety of contents including text, audio, and video over the Internet. Moreover, findings of this study contribute to the broader literature on computer-assisted language learning (CALL) by examining the effectiveness of new social media types in teaching language features.

2. Review of related literature

One controversy surrounding second language acquisition (SLA) research is the explicit/implicit debate as there is no agreed upon definition for these concepts among SLA researchers and scholars (VanPatten & Williams, 2015). According to Ellis (2008), implicit knowledge is intuitive, procedural, systematically variable, and automatic; explicit knowledge on the other hand is conscious, declarative, anomalous, and inconsistent. The former is for use in fluent and spontaneous language use, whereas the latter is accessible through controlled processing in planned language use (ibid.). In this

regard, it is possible to identify three potential positions related to explicit and implicit learning in SLA: SLA is largely (or exclusively) implicit, SLA is largely (or exclusively) explicit, and SLA involves both implicit and explicit learning (VanPatten & Benati, 2015).

Two arguments against explicit teaching of pronunciation comes from critical period hypothesis (CPH) which claims that adults can't acquire native-like pronunciation in foreign language, and Krashen's acquisition/learning distinction which considers pronunciation as an acquired skill and asserts that instruction makes no difference (Jones, 2002). When reviewing the studies conducted in the field of SLA examining CPH, "it would appear that a strong notion of critical period is untenable" (VanPatten & Benati, 2015, p. 27) and "there is no consensus regarding the duration and scope of such a critical period, and the evidence presented in support of the notion of a critical period is very far from conclusive" (Singleton & Muñoz, 2011, p. 419). Research also indicates that instruction is beneficial and plays a significant role in terms of the rate of learning, accurate use of language by learners, and their long-term success and achievements (Spada & Lightbown, 2012; also see: Housen & Pierrard, 2005). Teaching pronunciation is also uniquely sensitive (and hence important) among other skills as it is related to individual and social identities of learners (Seidlhofer, 2001). Moreover, pronunciation teaching makes students aware of different sounds and sound features, improves their speaking significantly, and enhances their comprehension and understanding of spoken English (Harmer, 2015).

In recent years, new and exciting applications of digital technologies including mobile technologies, gaming, and social media, to name just a few, have been employed by teachers and researchers for second and foreign language learning (Smith, 2017). Mbah, Mbah, and Iloene (2014), investigated students' experiences and expectations on the use of podcasts in learning English pronunciation in Igboland, Nigeria. The study concluded that podcasts improved students' English pronunciation regardless of their Internet-using habits, language proficiency level, or gender. In this study, students considered podcasts as an effective tool which improved their oral performance in English phonetics-related courses to a satisfying level through the use of mobile gadgets. In another study, Saran, Seferoglu, and Cagıltay (2009) using a mixed-method approach, examined the potentials and effectiveness of using mobile phones and multimedia massages via mobile phones in improving language learners' pronunciation in Turkey. In order to investigate the comparative effectiveness of supplementary materials used, these researchers divided participants in three different groups of mobile phones, web pages, and handouts. Findings of this study revealed that using mobile phones had positive effects on language learners' pronunciation and participants provided positive feedback on using mobile phones and applications for language learning purposes. Thornton and Houser (2005) also investigated the using of mobile phones in English education in Japan. In their "learning on the move" project, short mini lessons were delivered to students' mobile phone as text materials (e-mails) three times a day, and in "vidioms" project, participants received video, and web materials for teaching idioms in their mobile phones and PDAs. According to results, students evaluated materials designed for mobile phones positively and test results indicated that they were able to learn using this medium. Moreover, participants in this study were comfortable reading text and viewing video on small screens.

Blattner and Lomicka (2012) investigated how social networking sites (SNSs) are used in a language course and how students responded to them. This study was also intended to examine the attitudes of language learners and teachers regarding the use of Facebook (FB) in an academic setting. Based on their findings, researchers reported that students reacted positively to the use of FB in their language class as they found many benefits such as real audience. Participants also recognized FB as a new platform where they can put their developing language skills into practice and interact with native speakers in authentic and meaningful interaction. They also described FB as "casual" and "pressure free" which makes them comfortable practicing their written skills outside the classroom. On the other hand, participants of this study were less familiar with using FB in academia and tended to use it for group discussions and videos. Blattner and Fiori (2009) consider community building and development of socio-pragmatic competence via FB as useful pedagogical practices and possibilities in technology integrated classrooms.

Another social media network which attracted considerable attention among language teachers and researchers is Twitter. Mork (2009) identifies main advantages of using Twitter in English as Foreign Language (EFL) teaching as (a) communicating class content, (b) sending out small, timely pieces of information, (c) encouraging collaboration and feedback, and (d) encouraging concise writing. Mompean and Fouz-González (2016) studied the effectiveness of Twitter as a second language learning/teaching tool for pronunciation teaching. The purpose of this study as stated by researchers was to examine weather this social media can foster online participation (EFL learners' motivation) and the extent to which it may have a positive effect on the pronunciation of some widely mispronounced words by EFL learners. The study was carried out with students from a language school in Spain and participants received a number of tweets on a daily basis, featuring the pronunciation of a word considered to be difficult given unusual sound-spelling correspondences, lexical stress, or the presence of silent letters. Using a pre-test–post-test design, this study revealed that the instruction had a beneficial effect on the students' pronunciation and they were actively engaged during the study. Two limitations of this study according to the authors was the lack of a control group and a delayed post-test to examine the benefits of instruction over time.

Some researchers also investigated the application of local social networking sites to learning languages other than English. For example, Ota (2011) examined the nature and extent of SNSs communities available for second language learners of Japanese for learning this language outside the classroom by focusing on "mixi" and FB. This selection was mainly because of popularity of mixi as an SNS which is created for Japanese with all instructions in Japanese language and popularity of FB all over the world. Some factors such as community purpose, members' backgrounds, language selection, types of posting topics, and purpose of interaction are identified as important considerations when selecting an SNS for a group of language learners. Based on this study, a beneficial aspect of SNSs for second language learning was the opportunities to expand the learners' networks and the possibility to connect with multiple partners at the same time. SNSs, also provided language learners with a portal to access other information and sources as well as opportunities to organize face to face interaction.

Taking into consideration aforementioned studies, and the fact that Iranian EFL learners are restricted in using widely popular SNSs such as FB, Twitter, and YouTube, we believe that social media network Telegram can be employed by Iranian Language teachers and learners in various ways. Although the focus of current study is on explicit teaching of commonly mispronounced English words by EFL learners using this locally popular SNS, different features of Telegram (and similar SNSs) combined with teachers' and learners' growing access to internet and electronic devices, can be used to teach language skills and components such as listening, reading, writing, and vocabulary. Current investigation also aims to expand the study conducted by Mompean and Fouz-González (2016) by using a different SNS for teaching pronunciation, and also including a control group and a delayed post-test in research design.

3. Method

3.1. Participants
The participants of this study included 30 native speakers of Persian who were learning English as a foreign language in an Iranian language learning institute. The mean age of participants was 16 and since in most Iranian language learning institutes males and females are assigned to separate classes in different days, we decided to include two classes of male language learners in this study. There were also some limitations in randomly assigning participants to one of control or experimental groups. However, after analyzing pretest results, we realized that two classes were similar and there was no statistically significant differences among them before starting the treatment. The general language level of participants was B1 based on CEFR (equivalent to IELTS 4–5 and TOEFL iBT 31–34). The participants agreed to take part in this study and they were informed that this is an out of class learning activity and they are completely free to participate or quit the program whenever they want. This study was conducted in the summer of 2016 to make sure that student receive no additional

English language education in state-run schools (ministry of education) and also to minimize the possible contacts between participants from experimental and control groups outside the classroom.

3.2. Materials

After searching the Internet for commonly mispronounced English worlds by foreigners, 20 words have been selected for this study from following website: https://jakubmarian.com/english-words-most-commonly-mispronounced-by-foreigners/ (Appendix A). These words are difficult to pronounce by EFL learners for some reasons such as the fact that English is not a phonetic language and it is often difficult to know how to pronounce a word by its spelling. For control group, we decided to teach 20 words (Appendix D) from Vocabulary for the High School Students, a book by Harold Levine, Norman Levine, and Robert Levine published by Amsco School Publications Incorporated in 2005.

3.3. Procedures

The first stage of the study included the administration of a pre-test and creating two broadcasting channel for each of experimental (class A) and control (class B) groups. In order to do so, we designed a pre-test (Appendix B) and asked student to read 20 sample sentences containing target words individually and recorded their voices for further analysis of pronunciation errors. Especial care was taken to present these sentences in a random order to each participant and making sure that participants don't realize the real purpose of the test which was intended to test their pronunciation of target words. After this phase, both classes are introduced to the study by their teachers, and students in class A joined English Pronunciation channel (Experimental group). Students in class B are told that they are going to learn some useful vocabulary on a daily basis using Telegram and they joined English vocabulary channel (control group). After four weeks of broadcasting daily pronunciation and vocabulary teaching messages in these two channels (five messages every week), we administered the post-test (Appendix C) for both classes to test participants' pronunciation of target words using different sentences; and again we recorded responses for further analysis. Participants in experimental group were also tested four weeks later at the end of their semester with the same procedures. Each pronunciation teaching message broadcasted to participants in experimental group included a picture of target word, a brief explanation related to its meaning and pronunciation (in English), and a short video clip downloaded from YouTube featuring the correct pronunciation of target item (Figure 1). As mentioned earlier, Iranian internet users cannot use YouTube normally, so we decided to download and share videos rather than YouTube links.

Figure 1. Screenshot representing broadcasting of a target word for participants in EXP group.

3.4. Data analysis

In order to analyze the results of this study, using IBM SPSS Statistics version 23, we performed independent samples *t*-tests to compare the results of both groups in pre-test and post-test and one-way repeated measures ANOVA to compare the scores of participants in three different times i.e. pre-test (time 1), post-test (time 2), and delayed test (time 3).

4. Results

Table 1 provides basic descriptive statistics for scores in pre-test for both experimental (EXP) and control (CONT) groups. The mean score for these groups are 6.1 and 5.9, respectively. Moreover, scores for subjects in control group have lower range (Range = 5) and less standard deviation (SD = 1.44) compared to results obtained from experimental group (Range = 7, SD = 2.14). These differences are best represented visually using a boxplot in Figure 2.

An independent-samples *t*-test was conducted to compare pre-test scores for experimental and control groups (Table 2). There was no significant difference in scores for experimental (*M* = 6.14, SD = 2.14) and control groups (*M* = 5.94, SD = 1.44), *t* (28) = .312, p < .05. The magnitude of differences in the means (mean difference = .2, 95% CI: −1.14–1.55) was very small (η^2 = .003) (Table 3).

The following boxplot (Figure 3) represents the distribution of participants' scores on the post-test. As it is quite evident, participants in experimental group have gained much higher scores and improved their pronunciation of target words on post-test.

Table 4 represents the results of an independent samples *t*-test conducted to compare post-test scores for experimental and control groups (descriptive statistics are provided in Table 3). There was a significant difference in scores for experimental (*M* = 15.93, SD = 2.36) and control groups (*M* = 6.24, SD = 1.34), *t* (28) = 14, *p* < .05. The magnitude of differences in the means (mean difference = 9.68, 95% CI: 8.26 to 11.09) was also very large (η^2 = .875).

Table 1. Descriptive statistics for experimental and control group's scores on pre-test							
Group		**N**	**Range**	**Minimum**	**Maximum**	**Mean**	**Std. deviation**
EXP	Pretest	14	7.00	3.00	10.00	6.1429	2.14322
	Valid *N*	14					
CONT	Pretest	16	5.00	4.00	9.00	5.9375	1.43614
	Valid *N*	16					

Figure 2. Boxplot for experimental and control group's scores on pre-test.

cogent ᐧᐧ education
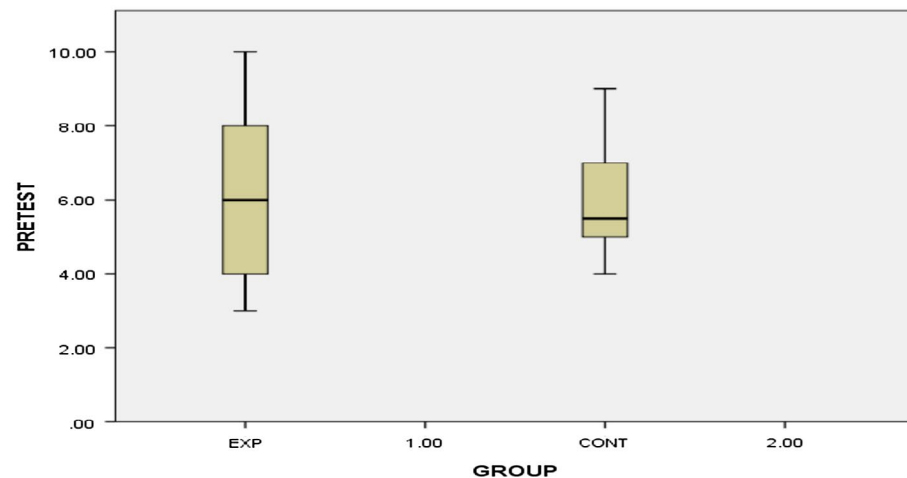
Table 2. Independent samples *t*-test comparing EXP and CONT groups (pre-test)										
		Levene's test for equality of variances		*t*-test for equality of means						
		F	Sig.	*t*	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
									Lower	Upper
Pretest	Equal variances assumed	2.411	.132	.312	28	.757	.20536	.65848	−1.14349	1.55420
	Equal variances not assumed			.304	22.246	.764	.20536	.67602	−1.19573	1.60645

Table 3. Descriptive statistics for experimental and control group's scores on post-test							
Group		N	Range	Minimum	Maximum	Mean	Std. deviation
EXP	Posttest	14	8.00	11.00	19.00	15.9286	2.36852
	Valid *N*	14					
CONT	Posttest	16	5.00	4.00	9.00	6.2500	1.34164
	Valid *N*	16					

Figure 3. Boxplot for experimental and control group's scores on post-test.
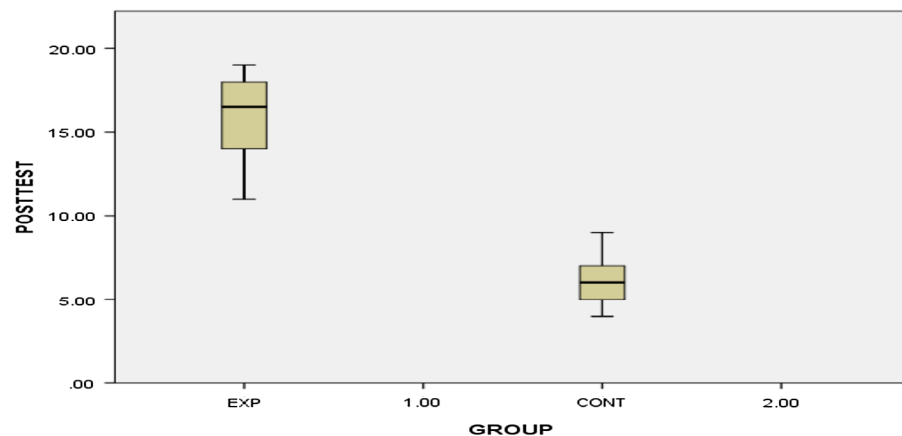
Table 4. Independent samples *t*-test comparing EXP and CONT groups (post-test)										
		Levene's test for equality of variances		*t*-test for equality of means						
		F	Sig.	*t*	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
									Lower	Upper
Post-test	Equal variances assumed	5.490	.026	13.999	28	.000	9.67857	.69136	8.26239	11.09475
	Equal variances not assumed			13.510	19.961	.000	9.67857	.71638	8.18403	11.17311

A one-way repeated ANOVA was conducted to compare participants' scores in experimental (EXP) group at Time 1 (prior to treatment), Time 2 (following the treatment), and Time 3 (four-week follow-up). The means and standard deviations are presented in Table 5.

Table 6 represents the results of multivariate tests. The value for Wilks' lambda is .054, with a probability value of .000 ($p < .0005$). Since the p value is smaller than .05, the results indicate that there is a significant effect for time. Moreover, the last column provides the magnitude of effect size which is very large ($\partial\eta^2 = .946$).

Table 7 reports the results of pairwise comparisons for each pair of time points and indicates weather the differences between them are significant. Based on various comparisons in this table, the change in experimental group's mean from time 1 to time 2 and time 3 is statistically significant (in Sig. column values are less than .05), and from time 2 to time 3 is not (Sig. = .65).

Table 5. The means and standard error of means

Measure: MEASURE_1

Group	Time	Mean	Std. error	95% Confidence interval	
				Lower bound	Upper bound
EXP	1	6.143	.573	4.905	7.380
	2	15.929	.633	14.561	17.296
	3	15.071	.691	13.578	16.564

Table 6. Multivariate tests

Group		Value	*F*	Hypothesis df	Error df	Sig.	$\partial\eta^2$
EXP	Pillai's trace	.946	105.993[a]	2.000	12.000	.000	.946
	Wilks' lambda	.054	105.993[a]	2.000	12.000	.000	.946
	Hotelling's trace	17.665	105.993[a]	2.000	12.000	.000	.946
	Roy's largest root	17.665	105.993[a]	2.000	12.000	.000	.946

Notes: Each *F* tests the multivariate effect of Time. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

[a]Exact statistic.

Table 7. Pairwise comparisons

Measure: MEASURE_1

GROUP	(I) Time	(J) Time	Mean difference (I–J)	Std. error	Sig.[a]	95% Confidence interval for difference[a]	
						Lower bound	Upper bound
EXP	1	2	−9.786*	.648	.000	−11.564	−8.007
		3	−8.929*	.923	.000	−11.462	−6.395
	2	1	9.786*	.648	.000	8.007	11.564
		3	.857	.662	.653	−.960	2.674
	3	1	8.929*	.923	.000	6.395	11.462
		2	−.857	.662	.653	−2.674	.960

Note: Based on estimated marginal means.

*The mean difference is significant at the .05 level.

[a]Adjustment for multiple comparisons: Bonferroni.

5. Discussion and conclusion

Pronunciation is the most difficult aspect of language teaching and learning which plays a vital role in successful communication both productively and receptively (Setter & Jenkins, 2005). According to Nunan (2015), when it comes to teaching pronunciation, language teachers can be divided into two groups: one group loves teaching it, and another group hates it. One reason for this kind of dichotomist attitude toward teaching pronunciation might be that teachers are nervous of dealing with sounds and intonation, and they believe they have too much to do already in language classroom (Harmer, 2015). Moreover, pronunciation is taught infrequently and unsystematically in language classes for some reasons such as inadequate teacher training which leads to incompetent and unconfident teachers, the varied and diverse needs of learners, and lesser priority of pronunciation compared to other skills (Levis, 2007). In recent years, however, rapid growth of digital technologies and increasing access of language learners and teachers to them, provided us a promising way out of this situation. The main goal of this study was to examine the possibility of teaching correct pronunciation of some commonly mispronounced English words by foreign language learners using a locally popular social media network. In order to do so, we created two broadcasting channels for each of control and experimental groups and delivered materials for each group using internet as an out of class learning activity.

After four weeks of treatments, our analysis of quantitative results (independent samples t-test) revealed that pronunciation of participants in experimental group ($N = 14$) improved significantly compared to participants in control group ($N = 16$) (Table 4). Moreover, a one-way repeated measures ANOVA was conducted to compare the scores of participants in experimental group in three different times: pre-test (time 1), post-test (time 2), and delayed test (time 3). There was a significant effect of time factor from pre-test to post-test and delayed test but not from post-test to delayed test (Table 7). These findings indicate that the use of social media network Telegram contributed significantly to improvement in participants' pronunciation.

One reason for the significant improvement in participants' pronunciation of target words in experimental group might be its availability for learners in any time and place. The videos broadcasted to learners were short and less than 2 MB in size. Although it is nowadays possible to share much larger files (even in GBs) using this kind of platforms, we decided to use smaller files in size to make them easy to download and save. According to Setter and Jenkins (2005), pronunciation teaching materials should be made more readily available to teachers and learners and computer applications have a great potential in doing so. Moreover, there are some inherent motivational effects of technology (Stockwell, 2013) which we believe have cotributed to improved pronunciation among participants of this study as "introducing new technologies into language learning environments has the potential to boost learner motivation" (p. 157). In fact, this aspect of motivational capacity of new technologies and learning environments were evident in this study since all students in experimental and control groups willingly participated in it. Finally, it could be argued that explicit focus on these commonly mispronounced words seems to be effective and contributed largely to participant's gains. Nation and Newton (2009) claim that a well-balanced language course should consist of four roughly equal strands: meaning focused input, meaning focused output, language focused learning, and fluency development using known language items and features. Language-focused learning "involves the deliberate learning of language features such as pronunciation, spelling, vocabulary, grammar and discourse" which can add directly to implicit knowledge and raise consciousness to help later learning (p. 7).

This study has some important implications for the use of technology in teaching language skills such as pronunciation. First, it should be noted that as mentioned earlier, most of the time, language teachers don't find sufficient time to teach pronunciation during class hours. In this regard, language teachers can employ social media networks extensively to compensate for this shortage in time and to share a variety of contents including pictures, text, audio, and video using these platforms to provide learners with authentic materials for different language skills. Moreover, using social media networks in language teaching can benefit language teachers yet in other ways, as

teachers can monitor learners' SNS communities and the way they use target language outside the classroom in those networks to find out difficult and challenging aspects of their language use, and focus language teaching in classroom on these features (Ota, 2011). Second, in teaching pronunciation in language classroom, affective considerations need to be accounted for:

> Emotions can run high whenever language learners are asked to develop new pronunciation habits. It is essential to realize that pronunciation practice normally takes place in front of other students and a teacher. There are many learners who have what they believe to be very good reasons to resist a teacher's effort to modify their ways of pronouncing English. Peer pressure often plays an important a role. A learner may fear rejection from classmates if her or his pronunciation begins to sound better than other students in the room. (Murphy, 2003, p. 116)

Technology plays a very important role in dealing with affective considerations by providing learners with opportunities to practice and improve their pronunciation in a private space and without presence of their classmates (Nunan, 2015). Third, it seems that despite the popularity and huge availability of new learning tools such as SNSs for language learning purposes, some learners may not be able to harness them effectively and they need guidance to deal with complexities of these dynamic learning environments (Blattner & Lomicka, 2012). In this regard, we believe that before integrating new technologies into language teaching, teachers need to spend some time on training learners.

Current study has some limitations that should be acknowledged. Regarding the sampling, we were unable to assign participants randomly to experimental and control groups and also to include female students in our study. Despite our conclusion that two groups were similar before the four weeks of treatment (Table 2), the results of this study cannot be generalized without taking gender differences into consideration as there might be different attitudes toward social media networks and their use in specific social contexts for males and females. Moreover, our study was narrowly concerned with teaching correct pronunciation of commonly mispronounced English words using social media networks and we didn't include other aspects of pronunciation such as segmental and suprasegmental features which seems to be more relevant in current emphasis of teaching pronunciation. Future research in this area can focus on teaching those aspects of pronunciation in different contexts using various tools and resources currently available. It is also possible to research empirically the effectiveness of those locally and globally popular SNSs in teaching other language skills including reading, listening, speaking, writing, vocabulary, and grammar in different contexts.

Author details
Ismail Xodabande[1]
E-mail: ismail.kh.tefl@gmail.com
ORCID ID: http://orcid.org/0000-0001-5599-8582
[1] English Department, University of Guilan, Rasht, Iran.

Citation information
Cite this article as: The effectiveness of social media network telegram in teaching English language pronunciation to Iranian EFL learners, Ismail Xodabande, *Cogent Education* (2017), 4: 1347081.

References
Baron, N. S. (2008). *Always on: Language in an online and mobile world*. New York, NY: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195313055.001.0001

Blake, R. J. (2008). *Brave new digital classrooms: Technology and foreign language learning*. Washington, DC: Georgetown University Press.

Blattner, G., & Fiori, M. (2009). Facebook in the language classroom: Promises and possibilities. *Instructional Technology and Distance Learning (ITDL), 6*, 17–28.

Retrieved from http://www.itdl.org/journal/jan_09/article02.htm

Blattner, G., & Lomicka, L. (2012). Facebook-ing and the social generation: A new era of language learning. *Alsic, 15*(1). doi:10.4000/alsic.2413

Ellis, R. (2008). *The study of second language acquisition* (2nd ed.). Oxford: Oxford University Press.

Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning, 27*, 70–105. https://doi.org/10.1080/09588221.2012.700315

Hardison, D. (2009). From the special editor. *Language Learning & Technology, 13*, 2–3. Retrieved from http://llt.msu.edu/vol13num3/speced.pdf

Harmer, J. (2015). *The practice of English language teaching* (5th ed.). Harlow: Pearson Education.

Housen, A., & Pierrard, M. (Eds.). (2005). *Investigating instructed second language acquisition*. Berlin: Mouton de Gruyter.

Jones, R. H. (2002). Beyond 'listen and repeat': Pronunciation teaching materials and theories of second language acquisition. In J. C. Richards, & W. A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 178–187). Cambridge: Cambridge Univesity Press. https://doi.org/10.1017/CBO9780511667190

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons, 53*, 59–68. doi:10.1016/j. bushor.2009.09.003

Levis, J. (2007). Computer technology in teaching and researching pronunciation. *Annual Review of Applied Linguistics, 27*, 184–202. doi:10.1017/ S0267190508070098

Mbah, E., Mbah, B., & Iloene, M. (2014). Podcasts for learning English pronunciation in Igboland: Students' experiences and expectations. *The EuroCALL Review, 22*, 57–68. https://doi.org/10.4995/eurocall.2014.3635

McQuiggan, S., Kosturko, L., McQuiggan, J., & Sabourin, J. (2015). *Mobile learning: A handbook for developers, educators, and learners*. Hoboken, NJ: John Wiley & Sons. https://doi.org/10.1002/9781118938942

Mompean, J. A., & Fouz-González, J. (2016). Twitter-based EFL pronunciation instruction. *Language Learning & Technology, 20*, 166–190. Retrieved from http://llt.msu. edu/issues/february2016/mompeanfouzgonzalez.pdf

Mork, C.-M. (2009). Using Twitter in EFL education. *Te JALT CALL Journal, 5*, 41–56.

Murphy, J. (2003). Pronunciation. In D. Nunan (Ed.), *Practical English language teaching* (pp. 111–128). New York, NY: McGraw-Hill.

Nation, I. S., & Newton, J. (2009). *Teaching ESL/EFL listening and speaking*. New York, NY: Routledge.

Nunan, D. (2015). *Teaching English to speakers of other languages: An introduction*. New York, NY: Routledge.

Ota, F. (2011). A study of social networking sites for learners of Japanese. *New Voices, 4*, 144–167. doi:10.21159/nv.04.07

Richards, J. C. (2015). The changing face of language learning: Learning beyond the classroom. *RELC Journal, 46*(1), 1–18. doi:10.1177/0033688214561621

Saran, M., Seferoglu, G., & Cagıltay, K. (2009). Mobile assisted language learning: English pronunciation at learners' fingertips. *Egitim Arastirmalari-Eurasian Journal of Educational Research, 34*, 97–114.

Seidlhofer, B. (2001). Pronunciation. In R. Carter, & D. Nunan (Eds.), *The cambridge guide to teaching English to speakers of other languages* (pp. 56–65). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511667206

Setter, J., & Jenkins, J. (2005). State-of-the-art review article: Pronunciation. *Language Teaching, 38*(1), 1–17. https://doi.org/10.1017/S026144480500251X

Singleton, D., & Muñoz, C. (2011). Around and beyond the critical period hypothesis. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (Vol. II, pp. 407–426). New York, NY: Routledge.

Smith, B. (2017). Methodological innovation in CALL research and its role in SLA. *Language Learning & Technology, 21*(1), 1–3. Retrieved from http://llt.msu.edu/issues/ february2017/commentary.pdf

Spada, N., & Lightbown, P. M. (2012). Second language acquisition. In N. Schmitt (Ed.), *An Introduction to applied linguistics* (pp. 108–124). London: Hodder Education.

Stockwell, G. (2013). Technology and motivation in English-language teaching and learning. In E. Ushioda (Ed.), *International perspectives on motivation* (pp. 156–175). New York, NY: Palgrave Macmillan. https://doi.org/10.1057/9781137000873

Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning, 21*, 217–228. https://doi.org/10.1111/j.1365-2729.2005.00129.x

VanPatten, B., & Benati, A. G. (2015). *Key terms in second language acquisition* (2nd ed.). London: Bloomsbury.

VanPatten, B., & Williams, J. (2015). *Theories in second language acquisition: An introduction*. New York, NY: Routledge.

What can you do with Telegram? (n.d.). Retrieved from Telegram Messenger: https://telegram.org/

Zourou, K., & Lamy, M.-N. (2013). Introduction. In M.-N. Lamy, & K. Zourou (Eds.), *Social networking for language education* (pp. 1–7). New York, NY: Palgrave Macmillan.

cogent • education

Appendixes

A: English words most commonly mispronounced by foreigners
https://jakubmarian.com/english-words-most-commonly-mispronounced-by-foreigners/

(1) *Height* /haɪt/ (**haayt**); the pronunciation is as if it were written "hight". The "e" is there just to confuse foreigners.

(2) **Fruit** /fruːt/ (**froot**); the same situation as in the previous word; simply ignore the "i".

(3) **Subtle** /ˈsʌtl/ (**sʌ**-tl); "btle" simply doesn't sound good. Don't pronounce the "b".

(4) **Queue** /kjuː/ (**kyoo**); if you want to pronounce this word correctly, just think about the Q at the beginning; "ueue" is not pronounced at all.

(5) **Chaos** /ˈkeɪɒs/ (**kei**-oss); the pronunciation of this word is actually quite regular, but people tend to pronounce it as the same word in their own language, which usually differs from its English pronunciation.

(6) **Albeit** /ˌɔːlˈbiːɪt/ (aw'l-**bee**-it); this fairly formal word, meaning "although", is not used much in speech, but is still quite common in literature. Once you remember that it is actually a composition of three words "all be it", you will no longer have any problem with its correct pronunciation.

(7) **Mishap** /ˈmɪshæp/ (**mis**-hæp); the word is mis-hap, meaning mis-happiness, i.e. misfortune or bad luck.

(8) **Recipe** /ˈrɛsəpi/ (**res**-ə-pee); "cipe" in this case doesn't rhyme with "ripe"; it consists of two separate syllables.

(9) **Lettuce** /ˈlɛtɪs/ (**let**-iss); remember that lettuce doesn't grow on a spruce; and it also doesn't rhyme with it.

(10) **Womb** /wuːm/ (**woom**), **tomb** /tuːm/ (**toom**); people tend to pronounce "o" as in "lot". Think about "tomb" as about "to" + "mb". "Mb" may sound nice in Swahili, but not so much in English, so the "b" is silent. The same applies to the other words in which "mb" is a part of the same syllable, such as **numb**/nʌm/.

(11) **Caveat** /ˈkæviæt/ (**kæ**-vee-æt) (UK), /ˈkɑviˌɑt/ (**kaa**-vee-aat) (US); meaning "a warning", it is not so common in speech, but still appears in literature or official documents. Just remember that you can't eat a caveat.

(12) **Colonel** /ˈkɜːnəl/ (**kə-ə**-nl) (UK), /ˈkɜrnl/ (**kər**-nl) (US); is there a kernel inside a colonel? Well, at least in pronunciation, there is.

(13) **Comfortable** /ˈkʌmfətəbl/ (**kʌm**-fə-tə-bl) (UK), in US also /ˈkʌmftəbəl/(**kʌmf**-tə-bl); if you "come for a table" to a furniture shop, it will hopefully be comfortable, although it doesn't rhyme with it.

(14) **Hyperbole** /haɪˈpɜːbəli/ (haay-**pə**-ə-bə-lee) (UK), /haɪˈpɜrbəli/ (haay-**pər**-bə-lee) (US); don't confuse this word with a hyperbola, a geometrical shape. Hyperbole is a form of exaggeration, and it doesn't rhyme with a bowl.

(15) **Gauge** /geɪdʒ/ (**geydzh**); this word is especially useful to guitarists that speak about string gauges (i.e. how thick they are). It is pronounced as if the "u" were not there.

(16) **Greenwich** /ˌgrɛnɪtʃ/ (**gren**-itch); you probably know this word from the Greenwich Mean Time (GMT) time standard. Just remember that there is no green witch in Greenwich.

(17) **Paradigm** /ˈpærədaɪm/ (**pær**-ə-daaym); the pronunciation is quite natural, but some people are 'digging' this word a little bit too much. There is no 'dig' sound inside it.

(18) **Elite** /ɪˈliːt/ (ih-**leet**); elite people are certainly not a "lite" version of the population. Don't rhyme them with it.

(19) **Debris** /ˈdɛbriː/ (**deb**-ree) (UK), /dəˈbri/ (də-**bree**) (US); this words has retained its original French pronunciation, so the final "s" is not pronounced.

cogent •• education

(20) **Infamous** /ˈɪnfəməs/ (**in**-fə-məs); although the word is just "famous" with the prefix "in-" stuck in the front, it is not pronounced so.

(21) **Facade** /fəˈsɑːd/ (fə-**saad**); this word, meaning the front of a building, originates in French, and the pronunciation is still close to the French one.

B: Pre-test

Pretest	Target item
1. The table is available in several different heights	Height
2. Tropical fruits, such as bananas and pineapples	Fruit
3. There are subtle differences between the two versions	Subtle
4. I had to join a queue for the toilets	Queue
5. The house was in chaos after the party	Chaos
6. He finally agreed, albeit reluctantly, to help us	Albeit
7. We reached home without mishap	Mishap
8. A recipe for chicken soup	Recipe
9. Buy a lettuce and some tomatoes	Lettuce
10. The baby growing in her womb	Womb
11. Any discussion of legal action must be preceded by a caveat on costs.	Caveat
12. Colonel Jim Edge	Colonel
13. These new shoes are not very comfortable	Comfortable
14. The film is being promoted with all the usual hyperbole	Hyperbole
15. The fuel gauge was reading 'empty'	Gauge
16. The war was a paradigm of the destructive side of human nature	Paradigm
17. In these countries, only the elite can afford an education for their children	Elite
18. Debris from the explosion was flying all over the place	Debris
19. A general who was infamous for his brutality	Infamous
20. They seem happy together, but it's all a facade	Facade

C: Post-test

Post-test	Target item
1. The balloon reached a height of 20,000 feet	Height
2. Finish the meal with a piece of fresh fruit	Fruit
3. Her paintings are characterized by sweeping brush strokes and subtle colors	Subtle
4. We stood in a queue for half an hour	Queue
5. The kitchen was in chaos	Chaos
6. He accepted the job, albeit with some hesitations	Albeit
7. Only one horse finished the course without mishap	Mishap
8. I can't find the recipe book	Recipe
9. Tear the lettuce leaves into small pieces	Lettuce
10. The baby's head was starting to emerge from the womb	Womb
11. She will be offered treatment, with the caveat that it may not work	Caveat
12. He retired as a colonel in the air force	Colonel
13. Sit down and make yourself comfortable	Comfortable
14. It was not a hyperbole to call it the worst storm in 20 years	Hyperbole
15. The petrol gauge is still on full	Gauge

cogent ·· education

Post-test	Target item
16. A new study challenges this paradigm	Paradigm
17. The country's elite is opposed to the new ruler	Elite
18. She was hit by a flying debris from the blast	Debris
19. An in famous killer	Infamous
20. They were trying to preserve the façade of a happy marriage	Facade

D: Vocabulary items presented to participants in control group

Week 1	Week 2	Week 3	Week 4
Adroit	Destitute	Apprehensive	Alias
Ambidextrous	Frugal	Cower	Clandestine
Apprentice	Indigence	Timid	Enigma
Dexterity	Affluent	Audacious	Manifest
Versatile	Sumptuous	Dauntless	Avowal