TWITTER-BASED EFL PRONUNCIATION INSTRUCTION

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This paper looks at the use of Twitter as a language teaching/learning tool. It describes the results of a study aimed at testing Twitter’s effectiveness for pronunciation teaching. The purpose of the study was to determine whether Twitter can foster online participation and whether it may have a positive effect on the pronunciation of a number of words commonly mispronounced by EFL students. The study was carried out with students from a Language School in Spain. The students were sent a number of tweets on a daily basis, each of them featuring the pronunciation of a word considered to be difficult given unusual sound-spelling correspondences, lexical stress or the presence of silent letters. The results show that the instruction had a beneficial effect on the students’ pronunciation of the target words and that participants were actively engaged during the study. Implications of the results for the teaching of English pronunciation and the use of Twitter in language teaching are also offered.

Language(s) Learned in this Study: English

Keywords: Pronunciation, Computer-Assisted Language Learning, Mobile Learning, Online Teaching & Learning, Second Language Acquisition, Social Networking Sites


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INTRODUCTION

Unlike previous generations, today’s learners are surrounded by interactive media-sharing technologies leading to different learning styles (McBride, 2009). The advent of Web 2.0 tools and various electronic devices has led to the emergence of hybrid or blended learning (Buzzetto-More & Sweat-Guy, 2006; Goertler, 2011; Graham, 2005). This type of learning is characterized by a combination of different modes of delivery, modes of teaching and learning styles. Regarding foreign language learning, hybrid or blended learning “generally implies a learning space where instruction takes place in a traditional classroom setting and is enhanced or supplemented—sometimes even replaced—by computer-based or online activities” (Ducate, Lomicka, & Lord, 2012, p. 68), with students interacting with the teacher and other students both in person and virtually.

In this new scenario, foreign language teaching/learning is increasingly benefiting from a wide range of heterogeneous Web 2.0 tools such as e-learning environments, blogs, wikis, or social networking services (SNSs). The latter, for example, are rapidly gaining attention as teaching/learning tools (Godwin-Jones, 2008; Guth & Helm, 2010; Lamy & Goodfellow, 2010; Stockwell & Tanaka-Ellis, 2012; Thomas, 2009; Zourou, 2012) in an attempt to capture learners’ new technological habits. Researchers are moving from the question of whether or not to use SNSs in language learning to the question of which ones to use and how. The alternatives include not only worldwide SNSs (e.g., Facebook, MySpace, or Google+) but also more local SNSs (e.g., Nasza-Klasa in Poland, Tuenti in Spain, Mixi in Japan, etc.) and SNSs specifically devised for language learning (SNSLL) like Babel, Busuu or Livemocha. In the last decade, some researchers have focused on SNSs not originally intended as educational tools such as Facebook or Twitter (e.g., Antenos-Conforti, 2009; Blattner & Fiori, 2009,
2011; Blattner & Lomicka, 2012; Ota, 2011) as well as SNSLL (e.g., Brick, 2012; Harrison, 2013; Liu et al., 2013; Stevenson & Liu, 2010).

In this study, the focus was set on Twitter. This SNS serves the primary purpose of allowing its users to share their plans, engage in discussions, or express their views on different topics, events, news, etc. Twitter’s popularity has not passed unnoticed amongst researchers, who have pointed out its potential for educational purposes, including language teaching/learning (Baker, 2010; Dunlap & Lowenthal, 2009; Grosseck & Holotescu, 2008; Java, Song, Finin, & Tseng, 2007; Lamy & Zourou, 2013; Promnitz-Hayashi, 2011; Rinaldo, Tapp, & Laverie, 2011). Research suggests that Twitter can be used to create and encourage membership within a virtual community and social interaction and communication between teachers (Lord & Lomicka, 2014) or language learners (Antenos-Conforti, 2009; Borau, Ullrich, Feng, & Shen, 2009). Twitter can also be used to make students communicate with native speakers or peers (Liu et al., 2013) as well as professionals in the field (Dunlap & Lowenthal, 2009). Twitter has also been found to foster collaboration among students towards completion of a common task (Kassens-Noor, 2012), to stimulate output production (Kim, Park, & Baek, 2011) and to lead to better recall of important concepts (Blessing, Blessing, & Fleck, 2012) and better grades provided that teachers interact actively with students (Junco, Elavsky, & Heiberger, 2013; Junco, Heibergert, & Loken, 2010). Twitter can also be used to ask questions to the teacher or to open up a discussion (Briggs, 2008; Junco et al., 2010; Kassens-Noor, 2012), to carry out composition tasks, vocabulary exercises and listening activities (Mork, 2009) or to solve doubts and inform students about course-related events (Lowe & Laffey, 2011).

USING TWITTER FOR TEACHING ENGLISH PRONUNCIATION: THE CASE OF POTENTIALLY PROBLEMATIC WORDS

Apart from the educational uses and advantages of Twitter mentioned above, Twitter can also be used to address pronunciation (see a pilot study by Fouz-González & Mompean, 2012), as exemplified by a few popular Twitter accounts such as Pronunciation Book, Confident Voice, or Forvo (Pronunciation). The latter, for example, offers the pronunciation of English words and sentences pronounced by a vast range of speakers from different parts of the world. Related to these accounts, although not exclusively devoted to pronunciation, accounts like Oxford Words or Cambridge Words tweet “words of the day” with a link to the online dictionaries where readers can find the definition of the word and its pronunciation or phonemic transcription.

Although the available pronunciation-related Twitter accounts are a useful step forward in the use of SNSs for pronunciation teaching, further efforts should be made to explore Twitter’s potential in this respect. One motivation for this is the need to reestablish pronunciation as a core element of language curricula as pronunciation instruction still suffers, to some extent, the effects of its initial neglect by proponents of communicative language teaching (CLT) approaches (Celce-Murcia, Brinton, & Goodwin, 2010; Fraser, 2000; Isaacs, 2009). As is well-known, pronunciation enjoyed a prominent position in the structural, audiolingual approach to teaching. However, the advent of CLT, with its stress on meaningful communicative contexts and the use of authentic materials, marked the decline of L2 pronunciation instruction. The latter was perceived to be related more to accuracy and linguistic competence than to communicative competence. Since the mid-1980s, a renewed interest in pronunciation sought to relocate pronunciation within communicative approaches (Morley, 1991; Pennington & Richards, 1986; Setter & Jenkins, 2005). However, despite highlighting the importance of suprasegmentals for communication, communicative proponents have typically failed to equip teachers adequately with strategies for teaching pronunciation in a communicative way, with most materials far from presenting pronunciation in a truly communicative and holistic manner (Gilbert, 2010).

Given that SNSs like Twitter enhance social presence, encouraging interaction and communication between teachers and learners (Antenos-Conforti, 2009; Liu et al., 2013; Lord & Lomicka, 2014) and given the need for teachers to have a repertoire of strategies for teaching pronunciation in a more
communicative manner, the current study aims to explore the usefulness of Twitter for the teaching and learning of English pronunciation. In doing so, the study addresses two research questions: a) can the use of Twitter bring about active participation on the part of the (Spanish EFL) students? and b) can Twitter help learners improve their pronunciation of commonly mispronounced lexical items? Given the alleged educational advantages of Twitter mentioned above, it is hypothesized that a) Twitter will foster active online participation from students; and b) Twitter will be useful in making learners improve their pronunciation of commonly mispronounced lexical items.

The first hypothesis is based on the claim that the social nature of online networking lends itself to gratification of social and personal needs (Dixon, 1996; Ebersole, 2000) and encourages users to ‘share’ and ‘participate’. Given the positive results in terms of students’ engagement in studies focusing on Twitter with populations such as marketing students (Rinaldo et al., 2011) or pre-health professional majors (Junco et al., 2010), we believe that Twitter would also foster EFL students’ participation. This is due to the fact that computer-mediated communication (CMC) can relieve learners from time or psychological pressure to express themselves (Chun, 1994). CMC can also allow more equal opportunities to interact (Warschauer, 1996), increase motivation (Beauvois, 1995), self-expression (McBride, 2009) and facilitate recall (Blessing et al., 2012). Furthermore, CMC can induce the experience of losing track of time as a result of being fully engaged in an activity (Egbert, 2005). Finally, CMC engages students in more authentic social and communicative behavior than typically happens in classrooms where other modes of interaction are often merely simulated (Sykes, Oskoz, & Thorne, 2008). Hence, the gratification of social needs obtained through interactions in SNSs could be considered an important supplemental element to support and enhance learning.

The rationale for the first hypothesis is also based on the fact that Twitter is characterized by conciseness in content and high accessibility through computers, smartphones, tablet computers, etc. Additionally, given the fact that posts on Twitter (or tweets) are short—up to 140 characters—users do not spend a long time reading a given tweet and they can do so basically anywhere and at any time, as long as they have the appropriate technology. This can encourage opportunistic learning, enabling students to fill in time gaps between other tasks with bite-size learning, or to combine learning with tasks demanding low concentration (Kenning, 2007). Since a number of studies suggest that vocabulary can be taught effectively through SMS (Kennedy & Levy, 2008; Levy & Kennedy, 2005; Thornton & Houser, 2001, 2005) and MMS (Saran, Seferoglu, & Cagiltay, 2009), the same should apply to Twitter, as SMS, MMS and Twitter are all characterized by conciseness in content and high accessibility.

The second hypothesis is based on the fact that the target pronunciation aspects in this study were not considered problematic due to students’ perceptual or articulatory capacities. Participants in this study were not required to discriminate or learn to produce totally unfamiliar sounds since, leaving fine-grained phonetic difference aside, the target phonemes addressed in this study have near equivalents in the students’ L1 (Spanish). Instead, participants were required to learn that they needed to use a sound they could already produce in a particular contextual position in a word or to avoid pronouncing it for silent letters. Similarly, participants’ ability to modify stress within a word was not in question, since Spanish is a variable-stress language (see e.g., Ashby & Maidment, 2005) and students can manipulate and shift stress in syllables within a word. The current study assumes that students’ errors may be due to a lack of exposure to the target words, an overgeneralization in the use of some phonological units or grapheme-phoneme patterns in the L2 to other contexts (e.g., <ph> /ʃ/, Stephen, commonly mispronounced as */estifen/), a lack of conscious attention and explicit instruction, or a combination of these.

Two problematic aspects of pronunciation for Spanish EFL learners were addressed: (1) learners’ inappropriate choices of sounds due to the influence of orthography; and (2) learners’ incorrect stress placement. Regarding the inappropriate choice of sounds, typical errors often derive from: a) unusual sound-spelling correspondences in English (e.g., /v/ for <ph> in Stephen rather than /ʃ/); b) an association of an English grapheme/digraph with the Spanish phonemic value rather than the English one (e.g., /tʃ/ for
<ch> in archives rather than /k/ as Spanish <ch> is always /ʃ/, e.g., ocho /otʃo/ ‘eight’); and c) letters in orthography that do not materialize in pronunciation (e.g., <s> in aisle, or <l> in walk) given that silent letters are rare in Spanish. As for learners’ incorrect stress placement, errors often derive from unexpected lexical stress due to the existence of cognates in English and Spanish with different stress patterns, as in interMIttent-interniTENie (see Mairs, 1989; Monroy, 2001 for a more comprehensive account and examples of these errors).

As regards the one factor mentioned above that can explain student’s errors in this study and that depends on teaching, such as conscious attention/explicit instruction, opinions differ. Some approaches deemphasize the role of explicit instruction and knowledge in SLA on the assumption that explicit knowledge cannot be converted into implicit knowledge (e.g., Krashen, 1985, 1993). In contrast, other approaches maintain that learners can benefit from explicit knowledge, which can either become implicit knowledge or at least play a role in developing implicit knowledge (Ellis, 1993; Gass, 1997; DeKeyser, 2003).

The view that learners can benefit from explicit knowledge has resulted in different approaches in the field of SLA. Their common assumption is that paying conscious attention to the formal features of L2 input is beneficial for its processing and optimal L2 development (Schmidt, 1990, 2010). These approaches include, amongst others, consciousness-raising instruction (Ellis, 2003), input enhancement (Sharwood-Smith, 1993), and focus on form (Long, 1991; Long & Robinson, 1998). As Lightbown and Spada (2008) point out, the fact that instruction is most effective when it includes attention to form and meaning is not in question any longer. In this respect, explicit instruction seems particularly suitable for pronunciation (Couper, 2003; Pennington & Ellis, 2000; Saito, 2013). Pronunciation attainment is hindered by numerous factors (e.g., the learners’ age, L1, aptitude, or motivation; for a review, see Celce-Murcia et al., 2010 or Pennington, 1998), which is aggravated by the fact that pronunciation involves not only cognitive (Fraser, 2001) but also perceptual (Flege, 1995; Kuhl & Iverson, 1995) and psychomotor abilities (Leather & James, 1991). As Pennington (1998, 1999) suggests, as learners grow older, they get to a point in which any improvements will become extremely difficult without explicit instruction. In light of the above, we consider that Twitter may be a convenient instrument to help students with the types of pronunciation errors addressed in this study, provided that attention is drawn to the former through explicit instruction.

**METHOD**

**Participants**

Sixteen native Spanish EFL students (N=16) took part in this study. These participants were between the ages of 18 and 54. There were 5 males and 11 females (mean age 33.5). These students were learning English at an official Language School in Murcia (Spain) and following no other English course at the time the study was conducted. Participants were recruited from several classes and from different branches of the same language school. Their level of English was B1 (intermediate) according to the Common European Framework of Reference for Languages (CEFR). Participants were recruited via advertisement of the study from their teachers, although the latter did not take part in the study and the participants were not the researchers’ students either. Participants volunteered to take part in the study, for which they were not paid nor given academic credit, as the study was not part of their course.

**Stimuli**

Given the interlanguage problems described above, a list of potentially problematic items was compiled given their structural properties and proven difficulties and differences between Spanish and English in terms of pronunciation and spelling conventions, often described as leading to problems in the interlanguage of Spanish EFL learners (see Mairs, 1989; Monroy, 2001).
The list included 75 items featuring segmental and suprasegmental aspects. More specifically, three subgroups of 25 words each featured silent letters often pronounced by students (aisle */aɪsl/), unusual grapheme-phoneme correspondences (steak, mispronounced */stiːk/), and misplaced lexical stress (*caTHOlic). Silent letters included, amongst others, <t> (hasten), <l>, (half), and <w> (sword). Unusual grapheme-phoneme items featured either sound-letter correspondences like <s> = /ʃ/ (sugar) or sound-digraph correspondences like <th> = /ð/ (worthy). The stress pattern items addressed stress in specific, underived lexical items (e.g., politics, mispronounced *poLItics) or affixed words (e.g., guitarist, mispronounced *GUItarist). Given Spanish EFL learners’ preference for standard BrE or AmE pronunciation models (see e.g., Mompean, 2004), all reference phonological values for graphemes and lexical items in the current study apply at least to these two varieties as indicated in authoritative pronunciation dictionaries (e.g., Jones, Roach, Setter, & Esling, 2011; Wells, 2008).

In order to create a pre-test, the 75 words were intermixed with 25 distractors, or items whose stress pattern and grapheme-phoneme correspondences were uncontroversial for students (see Appendix A). The results obtained from the pre-test led to the choice of seven to ten items for each item subgroup. With these items, a set of tweets was created featuring the target words. The original plan was to use the same number of tweets for each item subgroup. However, the final figures depended on the data obtained from the pre-test. A target word was included in the set of tweets only if it had been mispronounced in the pre-test by at least 95% of the participants—a 100% rate of mispronunciation would have led to an undesirably low number of tweets. The final number of items was 27. Silent letters were featured in 11 tweets, grapheme-phoneme correspondences in 10, and lexical stress in six. Specific target words in tweets can be found in Appendix B in chronological order. A transcript of all tweets with links to the audio and video files can be found in Appendix C.

An attempt was made to make tweets as simple, short and student-friendly as possible. Target words were embedded in authentic language in an attempt to foster meaningful learning. Tweets contained audio and video links between one and two minutes long. These multimedia files contained excerpts from interviews, video clips, news, or songs covering a variety of subjects. Videos were downloaded with RealPlayer from YouTube or news sites like the BBC or the CNN. Audio clips were downloaded directly from the BBC website. Files were created and edited with Windows Movie Maker. After the edition of materials, files were uploaded to a private YouTube account.

As indicated above, the current study assumes that pronunciation instruction can be improved through conscious attention to form as well as input enhancement. In this respect, there are many ways in which the input can be enhanced (see Wong, 2005 for different techniques). For example, changing typography to highlight the saliency of particular forms (Han, Park, & Combs, 2008; Saito, 2013), or providing metalinguistic information (Ioup, 1995). The current study used both resources. Capital letters were used to signal stressed syllables. Pronunciation-related familiar words were also often used as examples alongside target words to foster meaningful learning (e.g., tweet 7 “Listen to the ‘ch’ in archives. Careful! It’s the same sound as the ‘k’ in key or the ‘c’ in come”). Finally, occasional translations of target words into Spanish were included. Phonemic transcription was kept to a minimum and full transcriptions of items were not used at all to avoid problems with symbol displays as well as extra difficulty in the tweets.

Tweets typically drew participants’ attention to the pronunciation of a target word in a straightforward manner (see sample tweet on aisle in Figure 1). Nevertheless, a few tweets asked participants to listen to a target word from a video/audio file and decide what they considered to be remarkable about its pronunciation. This strategy intended to prompt discussion among students, thus favoring a more active role on their part. In these latter cases the researchers would use a follow-up tweet with the focus on the intended pronunciation features, irrespective of whether students participated or not.
Figure 1. Sample tweet featuring the word ‘aisle’, with silent ‘s’

PROCEDURE

As a preliminary step to the Twitter-based teaching/learning program, a pre-test was administered to participants, followed by a questionnaire. The pre-test consisted in an oral task in which participants were asked to associate words with colors based on their impressions. The 100 word stimuli were arranged in 25-item columns. Students saw the words in blocks of five, each block containing at least one distractor as well as an example of each of the problematic aspects under study (see Appendix A). Next, students pronounced the words in the carrier sentence “____is____” (e.g., “house is blue”, in the sense that the word house evokes in the participant the color blue). This task was meant to elicit the students’ pronunciation of the target words without them knowing that pronunciation was the focus of the study. Apart from this, the 100-word list (75 potential targets + 25 distractors) was long enough to guarantee that participants would find it difficult to look the pronunciation of items up in the dictionary and/or discuss a significant number of items after the pre-test, which could have compromised the results of the study.

After the pre-test, participants were given an initial questionnaire with items addressing, amongst others, their SNS e-routine. All but one student claimed to use SNSs on a daily basis. Two students logged in once a day and the rest several times a day. Information regarding log-in time routines was used in an attempt to decide on a convenient time for sending tweets in this study. As for the most used SNSs, Facebook was used by 100% of the participants, Twitter by 80%, and Tuenti by 50%. As not all participants used Twitter before the beginning of the study, a video-tutorial was sent via email to all participants explaining how to log in and use Twitter. Participants were encouraged to use their personal accounts since this might facilitate integrating the study as part of their non-academic e-routine. However, participants could also create a specific account for the study if they preferred to do so.

The Twitter-based program took place during 27 working days, with one new tweet posted from Monday to Friday. Most target words were featured in one single tweet although, in a few cases, a second tweet was sent immediately to complete the first. This was only done on special occasions, for example if we suspected the word would be unknown for students and offered a translation or the sentence in context, or when we did not have enough space so as to copy the link to the audio/video file. Because Twitter’s timeline shows tweets in reverse chronological order, each tweet was sent twice a day, around 11:00 am and 18:00 pm respectively. This was done in order to make tweets more visible, as tweets are often replaced by other tweets received by participants later in the day. When participants logged in and read tweets, they were required to confirm that they had done so with a reading confirmation tweet (henceforth RC). Participants could also include comments or questions on the tweet/item (see Figure 2 as an example) or send more than one tweet. A register of student participation was kept during the study, including the number of RCs and the type of contribution they made (see details below). At all times during the Twitter-based instruction, the researchers provided feedback on demand from specific participants. This would include further clarifications, examples, or even links to additional audio or audiovisual material.
After completion of the Twitter-based program, participants received a post-test interview one to seven days after the study. The post-test consisted in an oral production task aimed at assessing the participants’ pronunciation of the target words for a second time. During the interviews, participants were asked to pronounce the target words in the same carrier sentence as in the pre-test, associating each word with a color (e.g., “Greenwich is green”). Participants’ occasional mispronunciation of other aspects of the target words—for instance, /e/ at the beginning of Stephen, that is, */esˈtivn/*—were not taken into account in order to consider that participants had succeeded in learning the target pronunciation aspect (e.g., /v/ for <ph> in Stephen rather than /f/).

The post-test was followed by a final questionnaire aimed at obtaining information about the students’ experience with Twitter in general and the study in particular. Questionnaire items enquired about the time participants went online during the study, perceived positive and negative aspects of the study, suggested changes to a similar Twitter-based program for future programs/studies, etc. A delayed post-test was administered a month after the post-test but it was only possible to meet up with four of the participants, so no conclusions can be offered in this respect due to the scarcity of data.

RESULTS AND DISCUSSION

This section presents the analysis of the data collected, which provide empirical evidence to suggest an informed answer to the study’s research questions.

Regarding the first research question, namely whether Twitter can bring about active participation on the part of EFL students, three measures of participation are discussed below: the number of completers and drop-outs, the number of RCs and the types of contribution participants made.

Drop-outs are participants who, despite following the study to various degrees, did not eventually take the post-test. In this study, ten participants took the post-test (62.5%) while 6 (37.5%) did not. These results suggest that the use of Twitter did not prompt unconditional participation on the part of all students. One possible reason for some students dropping out could be a loss in motivation due to insufficient bi-directional (researcher-student) interaction and feedback. However, data from the final questionnaires show that participants’ perception of student-researcher interactions and feedback provision was adequate. Just as tweets were considered to be interesting by most participants, all of them claimed that sufficient feedback had been provided by the researchers. Thus, drop-out rates and varying degrees of participation seem to be due to reasons other than disruption of fluent student-teacher interaction.

The amount of information received could also have had an impact on the number of drop-outs. For example, an excessive amount of information (or scarcity of it) when students logged in could have caused students to lose interest in the study. The decision to post a new tweet each day was taken given the researchers’ intention of making students focus on a single target word per day and find at least one new item each day when they logged in. Therefore, frustration at not finding new tweets when logging in or finding too many was reduced to a minimum. Nonetheless, an inspection of the dates of the RCs and statements in the post-test questionnaires reveals that most participants often sent several RCs at a time. In the open-ended questions, one of the students commented that one tweet a day was too much, while...
others claimed that they would have liked to receive even more. Thus, even though most participants considered the amount of tweets appropriate, some of them read several tweets at a time and regretted not having had the time to read them one by one as they were posted. Hence, although students may occasionally read several tweets at a time due to their busy schedules, a frequency of one different tweet (sent twice) per day does not seem to have affected the number of drop-outs significantly.

Another possible explanation for drop-out rates could be the duration of the study. The program involved the daily posting of tweets during 27 working days. Figure 3 below shows the number of participants producing RCs over time.

![Figure 3. Number or participants (N=16) producing RC tweets from first tweet (1) to last (27)](image)

The data reveal that, in general, participants were relatively diligent in producing RCs. Thus, the length of the study does not seem to have been a problem for most participants. Nevertheless, while on average 86.8% of participants produced RCs during the first 22 tweets, from item 23 on, tweets were confirmed by less than 68.7%. As can be seen in Figure 3, there is a clear decrease in the number of RCs following the 18th tweet. This suggests that participation declined towards the end of the study, after about the middle of the fifth week. Therefore, it could be considered that the duration of the study may have had a negative impact on the rate of drop-outs.

Some studies have looked at the number of students who volunteer to ‘follow’ the study as a measure of participation (e.g., Lowe & Lafey, 2011). In our study, six of the 16 participants did not complete the post-test. However, taking drop-out rates as the only measure of students’ participation is somewhat limited. Although the fact that people drop-out may suggest that the program was not successful at prompting participation, it could be argued that taking the post-test is independent of participation during the teaching/learning sessions. Some participants could have been actively involved in the study but found it inconvenient to carry out the post-test for some reason. The convenience of looking at participants’ actual performance during the study requires alternative measures of participation. One such measure is the number of RCs. One of the limitations acknowledged by Junco et al. (2010) and Junco et al. (2013) is that they measured engagement through students’ self-report. Students’ RCs, on the other hand, are empirical instances of their engagement in the study. RCs do not guarantee that participants have carefully read or even understood the tweets, but it is a measure of participants’ actual encounter with them. Given this, Table 1 shows the number of RCs per participant, irrespective of whether they had
pronounced the words well or not in the pre-test. The table also shows the RC rate by participants given the number of total tweets (i.e., 27), for both those who eventually took the post-test (completers) and for those who did not (drop-outs). The total number of RC was 244 (90.4%) for completers (range 70.4%-100%), 111 (68.5%) for drop-outs (range 18.5%-100%), and 355 (82.2%) for all participants.

Table 1. Participants (Ps) and Number and Rate of RC Tweets: Completers and Drop-outs

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These data show that completers confirmed most of the tweets while non-completers confirmed a more modest, yet high number of tweets. Interestingly, the drop-outs had a relatively high level of RCs. In fact, a Mann-Whitney U test showed that there were no statistically significant differences in the production of RCs between completers and drop-outs ($Z = -1.754$, $p = 0.084$). This means that the number of RCs was rather similar between the two groups. This supports the view that failure to take the post-test does not necessarily entail lack of participation in the study. In fact, except for P15, who had a RC rate of 18.5%, all the other five drop-outs had a RC rate over 50% and over 85% in three cases.

A further measure of participation that can be used in order to find out whether the use of Twitter did actually stimulate participation is to analyze the types of contribution students made. The instructions participants received did not require them to comment on every tweet. Asking participants to comment on tweets was considered very demanding as participants might at times find themselves with little or nothing to say. Instead, participants were told to reply to every tweet they read to notify the researchers. However, participants were given the chance to comment on the tweets or discuss them if they wished to do so. Given this, an analysis of the tweets sheds light on the type of contribution the study prompted. In this respect, a distinction can be made between I-have-read-it (henceforth OK) tweets and comment/content (henceforth CC) tweets.

OK tweets are simple confirmations of reading while CC tweets are confirmations including some type of content-related, self-motivated contribution referring to the researchers’ tweets or other participants’ contributions. In this study, participants’ CCs provided their own examples (on silent ‘s’ in ‘aisle’: “it’s
like in ‘island’, isn’t it?”), comments on the videos/audios relating them to their previous language experience (on ‘sword’: “... reminds me of my favourite song... saying ‘be my mirror, my sword and shield’”), comments on their own mispronunciations (on ‘catholic’: “I used to say caTHOlic!”), etc.

In terms of participation, Table 2 shows the number of OKs and CCs for each participant, including completers and drop-outs. Table 3 shows the overall data per group (completers, drop-outs, all participants), specifying the mean number of tweets per participant in each group. When the number in Table 2 is lower than the number of tweets (i.e., 27), the implication is that the student participated less than minimally expected. Conversely, if the number is higher than 27, participation exceeded the minimal expectations, which reflects a higher degree of participation.

Given this, an analysis of the data reveals that eight participants produced more tweets than the minimum required for the total number of target tweets, one participant produced the expected amount (i.e., 27) and seven produced fewer than expected. Tables 2 and 3 reveal that the mean production of tweets was 30.8 for completers and 20.5 for drop-outs. The data also indicate that completers produced more CCs (54.9%) than OKs (45.1%), although the same does not apply for drop-outs.

Table 2. Number of Tweets and Tweet Type Produced for Each Participant

<table>
<thead>
<tr>
<th>P</th>
<th>T</th>
<th>Ok</th>
<th>%</th>
<th>CC</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completers</td>
<td>P1</td>
<td>26</td>
<td>14</td>
<td>53.8</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>21</td>
<td>9</td>
<td>42.9</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>P3</td>
<td>38</td>
<td>10</td>
<td>25.6</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>P4</td>
<td>33</td>
<td>23</td>
<td>69.7</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>P5</td>
<td>29</td>
<td>13</td>
<td>44.8</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>P6</td>
<td>37</td>
<td>19</td>
<td>50</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>P7</td>
<td>36</td>
<td>16</td>
<td>44.4</td>
<td>20</td>
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<tr>
<td></td>
<td>P8</td>
<td>37</td>
<td>25</td>
<td>64.1</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>P9</td>
<td>20</td>
<td>9</td>
<td>45</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>P10</td>
<td>31</td>
<td>1</td>
<td>2.9</td>
<td>30</td>
</tr>
<tr>
<td>Drop-outs</td>
<td>P11</td>
<td>14</td>
<td>7</td>
<td>50</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>P12</td>
<td>17</td>
<td>17</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>P13</td>
<td>36</td>
<td>14</td>
<td>37.8</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>P14</td>
<td>24</td>
<td>24</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>P15</td>
<td>5</td>
<td>4</td>
<td>80</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>P16</td>
<td>27</td>
<td>27</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes. Participants (P), Tweets (T) Number and Rate of OK and CC Tweets: Completers and Drop-outs

The data in Tables 2 and 3 show that completers participated more actively than drop-outs and produced more CCs. However, these data treat the two different types of contribution equally. Alternatively, CCs could be considered to have a greater value in terms of participants’ involvement than mere OK tweets, so the analysis should reflect this difference. Similarly, the absence of participation (i.e., not reading the tweets) could be somehow penalized when assessing the level of participation in the study. Thus, an alternative measure of participation is to quantify participants’ engagement by assigning some sort of grade to each type of contribution.
Table 3. Overall Tweet Production per Group and Tweet Type

<table>
<thead>
<tr>
<th></th>
<th>Completers</th>
<th>Drop-outs</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>308</td>
<td>123</td>
<td>431</td>
</tr>
<tr>
<td>Mean T/P</td>
<td>30.8</td>
<td>20.5</td>
<td>26.9</td>
</tr>
<tr>
<td>Ok</td>
<td>139</td>
<td>93</td>
<td>232</td>
</tr>
<tr>
<td>%</td>
<td>45.1</td>
<td>75.6</td>
<td>53.8</td>
</tr>
<tr>
<td>C</td>
<td>169</td>
<td>30</td>
<td>199</td>
</tr>
<tr>
<td>%</td>
<td>54.9</td>
<td>24.4</td>
<td>46.2</td>
</tr>
</tbody>
</table>

Notes. Tweets (T), Mean Tweets Per Participant (Mean T/P), and Number and Rate of OK and CC Tweets: Completers, Drop-outs, All Participants

In this respect, Table 4 shows the grades for the two different types of contribution: OKs (1 point each), and CCs (1.5 points each) for each participant. In addition, the absence of participation is graded as -1 point. Table 5 shows the same results per subgroup. The final number of points awarded to each participant in each case is converted into a participation rate scheme where 27 points equal 100% participation for a given participant—given that 27 were the number of tweets sent—and lower or higher number of points represent lower and higher participation rates respectively. Although finding a perfect scheme is not an easy matter, in the authors’ opinion, these criteria can be used as an informative measure of participants’ actual engagement in the study.

Table 4. Points Awarded to Each Type of Contribution and Participation Rate

<table>
<thead>
<tr>
<th></th>
<th>Ps</th>
<th>No Reply</th>
<th>Points (x[-1])</th>
<th>OK Points (x1)</th>
<th>CC Points (x1.5)</th>
<th>All points</th>
<th>Participation rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completers</td>
<td>P1</td>
<td>1</td>
<td>-1</td>
<td>14</td>
<td>14</td>
<td>18</td>
<td>31</td>
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<tr>
<td></td>
<td>P2</td>
<td>8</td>
<td>-8</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>P3</td>
<td>1</td>
<td>-1</td>
<td>10</td>
<td>10</td>
<td>28</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>P4</td>
<td>2</td>
<td>-2</td>
<td>23</td>
<td>23</td>
<td>10</td>
<td>15</td>
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<tr>
<td></td>
<td>P5</td>
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<td>P6</td>
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<tr>
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<td>P8</td>
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<td>25</td>
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<td>18</td>
</tr>
<tr>
<td></td>
<td>P9</td>
<td>8</td>
<td>-8</td>
<td>9</td>
<td>9</td>
<td>11</td>
<td>16.5</td>
</tr>
<tr>
<td></td>
<td>P10</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Drop-outs</td>
<td>P11</td>
<td>13</td>
<td>-13</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>10.5</td>
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<tr>
<td></td>
<td>P12</td>
<td>10</td>
<td>-10</td>
<td>17</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>P13</td>
<td>3</td>
<td>-3</td>
<td>14</td>
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<td>33</td>
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<tr>
<td></td>
<td>P14</td>
<td>3</td>
<td>-3</td>
<td>24</td>
<td>24</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>P15</td>
<td>22</td>
<td>-22</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>P16</td>
<td>0</td>
<td>0</td>
<td>27</td>
<td>27</td>
<td>0</td>
<td>27</td>
</tr>
</tbody>
</table>

Notes. Participants (Ps), number of No replies, OK and CC tweets, points awarded to each type of contribution and participation rate. (No Replies = -1 p. OK = 1 p. C = 1.5 p.): Completers and drop-outs
Table 5. Overall Points and Mean Participation Rate per Group

<table>
<thead>
<tr>
<th></th>
<th>No Reply</th>
<th>Points</th>
<th>OK points</th>
<th>CC points</th>
<th>Overall points</th>
<th>Mean participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completers</td>
<td>26</td>
<td>-26</td>
<td>139</td>
<td>139</td>
<td>169</td>
<td>338</td>
</tr>
<tr>
<td>Drop-outs</td>
<td>51</td>
<td>-51</td>
<td>93</td>
<td>93</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>All</td>
<td>77</td>
<td>-77</td>
<td>232</td>
<td>232</td>
<td>199</td>
<td>398</td>
</tr>
</tbody>
</table>

Notes. Number of No Replies, OK and CC tweets, and points awarded to each type of contribution, overall points, and mean participation rate per group (completers, drop-outs and all participants)

As Table 5 shows, the mean participation rates are 135.7% for completers and 63.9% for drop-outs, with a mean participation rate of 108.8% for all participants. The participation rates for completers and drop-outs are also shown in the boxplot in Figure 4 below.

Figure 4. Bloxplot for Participation rates: drop-outs (mean: 63.9%) and completers (mean: 135.7%)

In order to find out whether there are statistically significant differences regarding the type of contribution between the participation rates of drop-outs and completers, a Mann-Whitney U test was conducted, revealing that the differences were significant ($Z = -2.117, p = .031$). This shows that completers participated to a very satisfactory level, based on the fact that they produced more CCs than OKs compared with the drop-outs’ rates. Although the participation rate in terms of type of contribution obtained by the drop-outs is moderately high (63.9%), students who completed the study until the end and attended the final interviews participated even more actively. Therefore, if we consider Twitter’s potential to stimulate participation, we can conclude then that the use of Twitter in this study encouraged participation. Participants were asked to simply reply that they had read the tweets, but the majority went beyond that and provided additional comments/information voluntarily. In almost half of the replies (46.2%) students provided their own examples, commented on the materials and shared their experience. The rate rises to 54.8% in the case of completers. These results should not be surprising as computer-
assisted instruction can be considered to foster a more active role on the part of learners. Chun (1994) states that CMC “allows students to play a greater role in managing the discourse, for example, they feel freer to suggest a new topic, follow up on someone else’s idea, or request more information” (p. 17). The results obtained seem to indicate that these patterns of behavior were also observed in this study.

The conclusion reached in this study that the use of Twitter stimulated participation is also supported by the fact that, unlike other studies (e.g., Borau et al., 2009), the study’s participants were not given any academic reward for their participation. This is considered to be important as the granting of academic credits or economic rewards could potentially lead to students’ participating simply to obtain the reward, therefore rendering a false measure of motivation and of the potential of Twitter to encourage participation. In addition, the participants were not the researchers’ students. Recruiting participants from researchers’ courses could have led to students feeling compelled to participate in some way. Thus, the results obtained suggest that the use of Twitter can encourage participation out of intrinsic motivation, without academic pressures or rewards.

With regard to the second research question, i.e., whether Twitter can be useful for English pronunciation teaching, only data from students who took the post-test are considered, as the performance of pre-test and post-test can be compared only for those participants. The measure used to assess potential benefits in students’ pronunciation is the number of pronunciations errors in the target items in the post-test as opposed to the number of pronunciation errors in the pre-test. The data suggest that the use of Twitter can indeed bring some benefits to students’ production.

Table 6 below shows, for each completer in the study, the number of target words that were mispronounced in the pre-test, the number of target words that were pronounced correctly in the post-test, and the gain rate. It should be borne in mind that even though all tweets were sent to all participants, not all tweets are taken into account in the analysis of results. The figures exclude the tweets participants read but whose target words had already been pronounced well in the pre-test, as no gains can be inferred from them.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>P10</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-acceptable (pre-test)</td>
<td>25</td>
<td>24</td>
<td>26</td>
<td>27</td>
<td>27</td>
<td>25</td>
<td>21</td>
<td>26</td>
<td>27</td>
<td>255</td>
<td></td>
</tr>
<tr>
<td>Acceptable (post-test)</td>
<td>22</td>
<td>22</td>
<td>26</td>
<td>24</td>
<td>25</td>
<td>12</td>
<td>16</td>
<td>17</td>
<td>16</td>
<td>19</td>
<td>191</td>
</tr>
<tr>
<td>Rate of gain (%)</td>
<td>88</td>
<td>91.7</td>
<td>100</td>
<td>88.9</td>
<td>48</td>
<td>59.3</td>
<td>81</td>
<td>63</td>
<td>61.5</td>
<td>70.4</td>
<td>74.9</td>
</tr>
</tbody>
</table>

Note. Participants (P), Number of Items Pronounced Well in Pre-test and Post-test, and Rate of Total Gain

The results show that the mean score for the completers was 74.9%, with a standard deviation (SD) of 17.1% (95% CI, 62.95%, 87.38%). We can conclude then that instruction did influence the participants’ pronunciation of the target items in a positive manner. However, the standard deviation is sizeable enough to suggest that a uniform effect of instruction is not observed, which means that not every participant benefited equally. Possible reasons for these individual differences may be due to the learners’ aptitudes for assimilating the information we shared, individual preferences towards the materials, the location where tweets were read (at home, on public transport, etc.), the number of tweets read at the same time, or their degree of engagement in the study (i.e., their participation rate). Nonetheless, despite these individual differences the general trend is that instruction had a positive effect on the study’s population.

The data above show that completers succeeded in pronouncing target items during the post-test as opposed to their performance during the pre-test. It would be interesting to see, however, whether they were more successful with some types of items than others. Thus, considering tweets featuring silent
letters, phoneme/grapheme correspondences, and lexical stress patterns as three different groups, gain rates were calculated by taking the number of target words that the participants pronounced acceptably. The results reveal that performance with items featuring silent letters (with a gain rate of 83.8%) was better than with items featuring lexical stress patterns (73.5%), which was in turn higher than with items featuring grapheme-phoneme correspondences (65.1%). From the production point of view, these findings are not surprising. Given the psycho-motor requirements of articulation (Leather & James, 1991), suppressing a sound might be considered easier than pronouncing a target sound since no articulatory effort has to be made in the first case. As regards the differences between grapheme-phoneme correspondences and stress placement, from the authors’ point of view, modifying stress within a word should also be easier, since both English and Spanish are variable-stress languages and there are no interferences between spelling and lexical stress.

CONCLUSION

As Levy and Kennedy (2005) point out, “widespread acceptance and use of new communication technologies does not necessarily point to effectiveness or value in the educational context” (p. 76). However, their existence is a strong motivation for empirical research and careful evaluation of the existing tools. In this respect, the current study has looked at the potential of Twitter as a tool for teaching pronunciation and fostering student participation amongst a group of Spanish EFL students. The results obtained from the study show that, in general, the use of Twitter encouraged participation and that the instruction had a beneficial effect on the students’ pronunciation of the target words.

Regarding participation, the majority of participants followed the study satisfactorily as revealed by the overall RC rate of 82.4%. One interesting fact about the learners’ participation was that, even though six students did not take the final interview, these drop-outs were nevertheless moderately diligent in following the study, as suggested by their 68.5% mean RC rate. This suggests that drop-outs’ not taking the post-test does not mean that they did not participate actively. Furthermore, the results show that, on many occasions, the use of Twitter prompted genuine CC contributions other than mere reading confirmation tweets, the minimum required.

As for the benefit of the study for students’ pronunciation of the target words, the gain rate for completers was 75.2%, which leads us to conclude again that the Twitter-based program, with its mixture of authentic materials and focus on form through metalinguistic information and typographic saliency, had a beneficial effect. Whether the benefits of this type of instruction can last over time could not be elucidated given the scarcity of data from the delayed post-test, which is a limitation of the current study.

The current study has other limitations that should be acknowledged. One of these is the lack of a control group, often used in similar studies to test possible gains from pre/post-test alone and to test that improvements are a result of instruction and not due to other factors. Given the limited number of volunteers for the study, we considered having the biggest number of students possible a priority over splitting the subjects into treatment and control groups. Future studies could include a control group receiving, for example, different tweets with a focus on vocabulary or grammar and not pronunciation. However, we consider that the lack of a control group is not a major limitation for this study. Firstly, the target items in the pre-test were presented as part of a 100-word set, and the task used to elicit the students’ output was supposed to measure ‘synesthesia’ in an attempt to distract participants’ attention from the actual purpose of the task. Secondly, learners did not hear the words pronounced during the pre- and post-tests, so the former had no chance of learning the pronunciation by reading the items. Thirdly, it is improbable that learners would remember the words from the pre-test, were able to look them up in case they wondered how to pronounce a particular word, or even encountered a significant variety of them—the most part low-frequency lexical item—during the (relatively short) duration of the study in academic or non-academic contexts. Finally, another reason for not including a control group was that the study was not only of scientific value but also considered to be potentially useful for students’ learning.
As Lord (2008) notes, depriving a control group of instruction when the project seems promising is always unfair. The students that participated in this study were expecting to learn something in return. Another possible limitation of the study is the fact that asking participants to ‘confirm’ reading tweets may have been considered by some participants as too controlling on the part of researchers. This may have prevented more spontaneous participation. Other methods of checking reading such as asking learners to perform a certain task after each tweet, using online tracking software, or asking participants to record their productions and sending/uploading them could be used in future studies. In fact, the lack of the latter option was regretted by some participants, who pointed out in their final questionnaire that oral practice combined with feedback would have been helpful in order to improve their pronunciation. In any case, it can be said that the results obtained show that Twitter “fitted the task” it was used for, that is, to illustrate the pronunciation of words students had trouble with and help them pronounce those problematic aspects acceptably through self-correction. Data from the final questionnaires reveal that most students considered the tweets to be useful to learn ‘tricky’ words whose pronunciation differed significantly from the students’ expectations. The results of the study showed that this was actually the case even in the absence of researchers’ feedback on the participants’ imitation/production of the target items during the study.

The limitations mentioned above suggest directions for future research related to issues like students’ e-routines, types of tweets and content, or the learning setting and its resources.

Regarding students’ e-routines, an analysis of students’ online activity and habits could be useful in an attempt to better implement SNSs such as Twitter in language teaching. Hargittay and Hsieh (2010), for example, found that students who were already engaged in social networking showed higher levels of participation. It would also be interesting to analyze whether learners who already use Twitter in their private lives are more likely to benefit from this type of instruction, or whether the learners who use it more actively (the most avid tweeters) obtain better results than those who use it less or who do not use it at all.

As far as types of tweets and content are concerned, future studies could investigate possible differences between tweets that include audio or video, differences between tweets that ask students a question and tweets that already give the information to students, or even differences in acquisition rate of items that are sent in a single tweet and items that are sent in several tweets. The topics covered could also have an impact on the effectiveness of the instruction. Moreover, research could also look into pronunciation-related issues not addressed in this study such as further segmental and suprasegmental features, attitudinal meanings of intonation, variation across English accents, morphophonological regularities in the L2, or L1/L2 contrasts.

Finally, regarding learning settings and resources, research could investigate the influence of the environment, location where students read tweets, or the devices used to access Twitter (a computer, a smartphone, a tablet computer). This may yield interesting insights for the field of mobile learning. In addition, given the existence of different SNSs, future studies should also look at the advantages and disadvantages of Twitter over other SNSs. The latter are relatively new tools to the language classroom and merit additional research to reveal their full educational potential (Ducate et al., 2012; Zourou, 2012).

Despite the limitations of the current study and the need for further research, the results obtained may encourage instructors to use Twitter in their classes. It is true that even if teachers are aware of the potential benefits of using SNSs in the FL classroom, they may find the implementation of these tools difficult (McBride, 2009). In fact, some have suggested that it would not be easy to integrate Twitter into the regular curriculum because of students’ busy schedules (e.g., Kim, 2010). However, unlike SNSLL such as Busuu or LiveMocha, Twitter does not require students to log into an overt learning environment. Instead, it allows for an integration of learning into students’ e-routine.
Teachers may use Twitter in numerous ways, depending on the educational context and students involved. One possible idea could be to use Twitter to send a “tweet of the day” featuring problematic aspects from the course syllabus. For pronunciation, common interlanguage problems for a particular target group may be featured. In any case, the results obtained suggest that Twitter can be beneficial for both pronunciation teaching and learning, encouraging teachers to implement this SNS alongside other educational resources, be it as part of an online or on-campus learning program.

APPENDIX A. Pre-test stimulus set targeting unusual sound-grapheme correspondences (underlined items), silent letters (items in italics), and unexpected stress patterns (items in capitals). The rest of items represent distractors.

<table>
<thead>
<tr>
<th>house</th>
<th>clean</th>
<th>heir</th>
<th>MODERNISM</th>
<th>northern</th>
</tr>
</thead>
<tbody>
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<td>castle</td>
<td>chalk</td>
<td>ORGANISE</td>
<td>cough</td>
<td>bristle</td>
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<td>TERRORISM</td>
<td>social</td>
<td>shepherd</td>
<td>Graham</td>
<td>drive</td>
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<td>monarch</td>
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<td>grass</td>
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<td>greenhouse</td>
<td>debt</td>
<td>PARIAH</td>
</tr>
<tr>
<td>Buckingham</td>
<td>INTERMITTENT</td>
<td>charlatan</td>
<td>CLARIFY</td>
<td>Thames</td>
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<tr>
<td>REALISE</td>
<td></td>
<td></td>
<td>although</td>
<td>mountain</td>
</tr>
<tr>
<td>sugar</td>
<td></td>
<td></td>
<td>table</td>
<td>would</td>
</tr>
<tr>
<td>MOTIVATE</td>
<td>Stephen</td>
<td>sofa</td>
<td>fasten</td>
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<td>lake</td>
<td>bomb</td>
<td>FLORIDA</td>
<td>laugh</td>
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<tr>
<td>river</td>
<td>coup</td>
<td>COMPOUND</td>
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<td>weapon</td>
<td>wood</td>
<td>yacht</td>
<td>mishap</td>
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<td>water</td>
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<td>spatial</td>
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<td>CANTERBURY</td>
<td>savour</td>
<td>sky</td>
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<td>Thai</td>
<td>pen</td>
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<td>rubber</td>
<td>bombing</td>
<td>Munich</td>
<td>COMMITTEE</td>
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</table>

APPENDIX B. Target words in the teaching/learning sessions.

Chronological order

Tw1 pariah, Tw2 mishap, Tw3 bombing, Tw4 luniatic, Tw5 Greenwich, Tw6 catholic, Tw7 archives, Tw8 heir, Tw9 Buckingham, Tw10 aisle, Tw11 debt, Tw12 Stephen, Tw13 gauge, Tw14 charlatan, Tw15 coup, Tw16 politics, Tw17 weapon, Tw18 combing, Tw19 worthy, Tw20 trough, Tw21 intermittent, Tw22 sword, Tw23 Graham, Tw24 southern, Tw25 guitarist, Tw26 hasten, Tw27 rhetoric

Pronunciation error type

Silent letters (11 items): Tw3 bombing, Tw5 Greenwich, Tw8 heir, Tw9 Buckingham, Tw10 aisle, Tw11 debt, Tw15 coup, Tw18 combing, Tw22 sword, Tw23 Graham, Tw26 hasten

Phoneme-grapheme c. (10 items): Tw1 pariah, Tw2 mishap, Tw7 archives, Tw12 Stephen, Tw13
gauge, Tw14 charlatan, Tw17 wepaon, Tw19 worthy, Tw20 trough, Tw24 southern
Lexical stress (6 items): Tw4 lunatic, Tw6 caTholic, Tw16 poLiTics, Tw21 intermiTtent, Tw25 guiTARist, Tw27 rhetoriC

APPENDIX C. Tweets.

1. Item: Pariah
   Bridget Jones is a love pariah no more. Careful with “pariah”, “ria” being pronounced as “Mariah” or “fire”. http://youtu.be/AB4bh1CpZyo

2. Item: Mishap
   a. Did you know the word “mishap”? (percance) What do you think about the “h”? Is it pronounced or not?
   b. Have a look at this video, a “mishap” in the musical version of Spiderman. The “h” is pronounced! http://www.youtube.com/watch?v=h1Uau120T_M

3. Item: Bombing
   In this piece of news you have 2 examples of the word “bombing”. CAREFUL! The “b” in the middle is NOT pronounced! http://www.youtube.com/watch?v=-63qtqe_dGk

4. Item: Lunatic
   Listen to this special by the BBC about George Orwell. Careful with the word “LUnatic”, the stress on the 1st syllable! http://www.goear.com/listen/efa400e/lunatic-bbc

5. Item: Greenwich
   Watch this video about Greenwich University and pay attention to the way “Greenwich” is pronounced: the “w” is silent! http://youtu.be/l6gosssl0ts

6. Item: Catholic
   Pay attention to the word CATHolic (católico). Spaniards tend to say caTHOlic, but the stress is on the first syllable! http://www.goear.com/listen/8000b73/catholic-bbc

7. Item: Archives
   Listen to the “ch” in “archives” (archivo). Careful! It’s the same sound as the “k” in “key” or the “c” in “come”! http://www.goear.com/listen/922fed4/archives-bbc

8. Item: Heir
   As ‘The Smiths’ say: “I am the son and the heir”. CAREFUL with the word “heir”!! (heredero) The H is not pronounced!! http://www.youtube.com/watch?v=qghCe_5Kea0

9. Item: Buckingham
   How do you pronounce “Buckingham”? The “h” is not pronounced! Listen to this link from the BBC about “Buckingham Palace” and try to imitate it. http://youtu.be/tP4d7XpstYQ

10. Item: Aisle
    Phoebe chooses Joey to walk her down the “aisle”! Careful! the “s” in “aisle” is not pronounced! http://www.youtube.com/watch?v=1vPr0dQtn7o

11. Item: Debt
    a. Today’s tweet is going to be different. Can you figure out what’s special about the pronunciation of ‘debt”? (we’ll give the answer
    b. tomorrow) Listen to this piece of news and give us your opinion! PLEASE don’t look it up,
just your thoughts!

12. Item: Stephen
Notice how Kesha pronounces the name “Stephen”. Many Spaniards say the “ph” with an /f/ but it is a /v/ as in “vein”. http://www.youtube.com/watch?v=rYbTizdXG3w

13. Item: Gauge
a. Today’s word is one of the most difficult words! Careful! Listen to the word “Gauge” (medida/indicador/medir)
b. Pay attention to the “au”, pronounced as the “a” in game, and the “ge” as “J” in John http://youtu.be/ovENFXZXBiE

14. Item: Charlatan
Pay attention to the word “Charlatan”, the “ch” being pronounced as the “sh” in “she”. http://youtu.be/Uu3vyFUmDDs

15. Item: Coup
Did you know the word ‘coup’ (golpe)? The “p” is not pronounced and the “ou” is the same as in grOUp. http://youtu.be/sqmhu_EpFz8

16. Item: Politics
Today’s word may be really useful these days: POlitics. Careful with the stress! it’s not poLItics, but POlitics! http://youtu.be/QXWXXXMrkRJE

17. Item: Weapon
Did you know the word ‘weapon’? (arma). Careful with the “ea”, it’s the same sound as the vowel in “bed”. http://youtu.be/ksRLiyOtk78

18. Item: Combing
a. Ok, this time you decide: What do you think it’s peculiar about the pronunciation of the word “combing”? http://youtu.be/tqGltn0E_6Q
b. Exactly! The “b” is not pronounced!

19. Item: Worthy
Listen to the word “worthy”. Do not pronounce the “th” as in “THink”, “th” here is actually pronounced as in “THis” /ð/. http://www.youtube.com/watch?v=rCD5m3SVLlg

20. Item: Trough
a. We are happy to introduce the new, the amazing, the latest...water trough! Careful! “trough” (abrevadero) is NOT “through”!

b. Two problematic sounds: “ou”, pronounced as the “o” in “hot” & “gh” as the “f” in “fly” http://youtu.be/hKYCkzBn2lo

21. Item: Intermittent
Do you know what IED is? Beware of the pronunciation of interMIttent, many people stress “ter” but the stress is on “mi”! http://youtu.be/6V827tIi-h4

22. Item: Sword
Pay attention to the pronunciation of “sword”. Notice that the “w” is not pronounced! http://www.youtube.com/watch?v=d1RYsZe9KJE

23. Item: Graham
How do you pronounce “Graham”? Don’t say it pronouncing the “h” as the “j” in Jamón, the “h” is not pronounced!  
http://youtu.be/gi_MHn8ZGis

24. Item: Southern  
Listen to the word ‘southern’, the ‘th’ is NOT pronounced as in ‘think’. It’s pronounced as in ‘these’. You don’t have to listen to the full song, just a minute or so ;)
http://youtu.be/o2EpucxN558

25. Item: Guitarist  
Are you familiar with Jimy Hendrix? He was a great “guiTArist” (careful! stress on the 2nd syllable). http://youtu.be/RcKKz_Sp7ik

26. Item: Hasten  
Did you know the word ‘hasten’ (acelerar/apresurarse)? Careful! The ‘t’ is not pronounced!  

27. Item: Rhetoric  
Careful with the stress of the word “Rhetoric”, it’s not rheTOric as in Spanish “retórica” but RHEtoric! http://youtu.be/LW0rJ5mpkS8

NOTES
1. An official Language School is a state-run, public language school offering language tuition and officially recognized diplomas of several foreign languages.

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