

The Electronic Journal for English as a Second Language

\* \* \* On the Internet \* \* \*

February 2019-Volume 22, Number 4

The Needs Analysis, Design, Development, and Evaluation of the English Pronunciation Guide: An ESL Teachers' Guide to Pronunciation Teaching Using Online Resources

### Jenelle L. Cox

English Language Center, Brigham Young University, USA jenellecox@sbcglobal.net

### Lynn E. Henrichsen

Linguistics Department, Brigham Young University, USA Lynn\_Henrichsen@byu.edu

#### Mark W. Tanner

Linguistics Department, Brigham Young University, USA Mark\_Tanner@byu.edu

### Benjamin L. McMurry

## **Abstract**

ESL students view the teaching of pronunciation as an important part of their English language education and state they need assistance in this area (Willing, 1988). In corroborating this point, Munro & Derwing (2006) add that research has shown that pronunciation is given relatively little attention in the ESL classroom. Although many ESL teachers agree with students on the importance of pronunciation teaching, they often do not feel qualified to teach pronunciation due to their own insufficient training in pronunciation teaching (Derwing, Diepenbroek, & Foote, 2012). Unfortunately, time constraints and other obstacles often keep practicing ESL teachers from obtaining the pronunciation-instruction preparation they need to fulfill students' needs. These factors led us to develop an online resource guide (now available at https://englishpronunciationguide.weebly.com/) to help English as a second language (ESL) teachers who may lack appropriate training in pronunciation teaching quickly access online video resources that will help them improve their students' pronunciation. Teachers can use these resources to educate themselves and then teach specific aspects of English pronunciation

to their students with greater competence and increased confidence. This article concludes with an evaluation of the *English Pronunciation Guide*.

Key Words: pronunciation, professional development, segmentals, suprasegmentals, teacher confidence, teacher education, training, videos, website

## Introduction

- "I think you hit the target with beginning teachers."
- "I really like the collection of instructional videos. To any teacher, these will be a great help."
- "I think this is an excellent website. I will be using it for sure!"

These comments reflect the feelings of ESL teachers who have visited the *English Pronunciation Guide* website, an online tool created to help classroom teachers who have little or no training or experience with ESL pronunciation instruction. This article describes the website itself and then outlines the process of designing, developing, and evaluating this website.

Some ESL teachers have stated they do not have confidence to teach pronunciation in their ESL classrooms. The *English Pronunciation Guide* was created to help ESL teachers acquire some basic pronunciation-teaching skills and thus feel more competent and confident in teaching pronunciation. The description of the development process is divided into the following sections:

- 1. Describing the problem
- 2. Needs analysis (internship)
- 3. Possible Solutions
- 4. Most Workable Solution
- 5. Application
- 6. Website Pages
- 7. Evaluation

## The Problem

Initially, program administrators and teachers at Brigham Young University's English Language Center (ELC) recognized that pronunciation instruction may not be occurring as often or as well as it should. To better understand these sentiments, pronunciation instruction at the ELC was evaluated. Prior to the evaluation the perceived problem was investigated by searching publications on pronunciation teaching. The following sections outline key points that indicate the importance of teaching pronunciation and reasons why teachers may be failing to teach it.

### The Importance of Pronunciation Teaching

When turning to research on pronunciation, we find that it plays a key role in ESL learners' successful communication in English and their perceived ability of doing so (Bakar & Abdullah, 2015). Intelligibility is defined as "the extent to which a listener actually understands an

utterance" (Derwing & Munro, 2005). With intelligibility as the goal of pronunciation teaching, the focus shifts to helping students be understandable (Levis, 2005). Some students who have had the opportunity to take a pronunciation course have described benefits that included enhanced awareness of their own pronunciation weaknesses, increased confidence, refined listening skills, and personal tools to improve their pronunciation throughout their lives (Derwing, Munro, & Wiebe, 1998; Henrichsen & Stephens, 2016).

ESL learners without specific pronunciation training may suffer from the consequences of poor English pronunciation. For example, the strong non-native accents of ESL learners and pronunciation of certain vowels and consonants often cause undesirable social interactions that include discrimination in employment and even harassment (Franklin & McDaniel, 2016). For this reason, ESL students typically view pronunciation as being a priority (Grim & Sturm, 2016) in their language education. Yet, even after studying and learning the language for years, many ESL students continue to struggle with English pronunciation (Gilakjani & Ahmadi, 2011).

### Reasons Teachers do not Teach Pronunciation

Students' struggles with pronunciation could be the result of the low priority given to explicit pronunciation teaching (Algahazo, 2015) in many ESL classes or programs. Even with students expressing their desires for pronunciation instruction, it is often included only as a minor component in speaking classes (Munro & Derwing, 2006) and a small or missing component of English teaching (Grant, 2014). Yet, research shows that pronunciation should be considered as an integral part of classroom activities (Gilakjani & Ahmadi, 2011). In brief, the teaching of pronunciation—although important—remains largely neglected in the field of English language teaching (Foote, Trofimovich, Collins, & Urzúa, 2013; Gilakjani & Ahmadi, 2011; MacDonald, 2002; Munro & Derwing, 2006).

One potential reason why some teachers may not prioritize pronunciation in their course curricula is because they may feel that pronunciation is not a basic component of language teaching. A survey done by Grim & Sturm (2016) of ESL teachers (57) and ESL students (292) to assess informally their feelings on pronunciation found that some foreign language teachers did not view pronunciation as a fundamental skill, and they rated it as least important when compared to other language skills such as writing and reading. In contrast, students rated pronunciation as the third most important language skill, behind communication and grammar.

Another reason pronunciation teaching is often neglected stems from some teachers' feelings of inadequacy. Some ESL teachers say they do not feel qualified to teach pronunciation due to their own lack of formal pronunciation training (Derwing, Diepenbroek, & Foote, 2012). The limitations felt by many teachers regarding pronunciation teaching have been documented in various contexts—by Fraser (2000) in Australia; Burgess & Spencer (2000) in the UK; Foote, Holtby, & Derwing (2011) in Canada; and Derwing (2008) in the USA. MacDonald (2002) cites several studies in Australia indicating that many teachers do not teach pronunciation because they do not feel competent to do so. Such teachers may want to provide their students with the pronunciation training they need to be efficient communicators, yet they themselves lack training in how to teach pronunciation. In the above studies, teachers were not explicit in their responses as to which specific aspects of pronunciation were challenging. Regardless of the exact pronunciation teaching issues, some teachers have expressed a desire for training in pronunciation teaching (Foote, et al., 2011) even though their time for professional development is limited.

# The Importance of Suprasegmentals

If teachers do not provide pronunciation instruction in their classrooms, students may be left on their own to identify pronunciation problems in their speech (Derwing & Rossiter, 2002). This may lead to incorrect assessment and misguided actions. In this same study, for students who could identify a pronunciation problem in their speech, 90% perceived segmentals, rather than suprasegmentals, as the area where they needed to improve. Only focusing on segmentals may limit learners' progress toward intelligibility since suprasegmentals have been shown to be needed in improving intelligibility and comprehensibility (Derwing & Munro, 2009).

Some teachers also overlook the importance of suprasegmentals in pronunciation teaching. Foote, et al. (2013), reported on data in Quebec, Canada from a study of three instructors involved in 92 teaching episodes when pronunciation was a part of language lessons. They observed 12 full days of teaching (covering 400 hours of instruction), but did not find one episode of suprasegmental teaching. Teachers' overall lack of knowledge and confidence may account for this void (Burgess & Spencer, 2000). Foote et al. also find that segmental sounds represented by letters of the alphabet may be easier to identify and address, which can be one reason for students' and teachers' overlooking important prosodic features. They further claimed that another reason segmentals are addressed more than suprasegmentals is that it may be easier to provide instructional focus for a single phoneme rather than the multiple words that many suprasegmentals involve.

# **Needs Analysis**

Based on the literature and experiences of teachers and administrators, the curriculum coordinator at BYU's English Language Center (ELC) requested that observations be done at the ELC to determine the quantity and quality of pronunciation instruction being performed there. It was decided that several classes would be observed during the course of a semester and then interviews of the teachers would be used for follow-up.

The ELC houses an intensive English language program that offers four language courses—grammar, writing, reading, listening and speaking—at each proficiency level. There are six levels of competency at the ELC: three lower levels, namely; Foundations A, B, and C (beginning, intermediate, advanced), and three upper levels (Academic A, B, and University Preparation). Using purposive sampling to elicit data of interest, during the spring/summer 2017 semester at the ELC, three upper-level advanced listening and speaking classes, Academic, A, B, and University Preparation, were observed for one week. It was assumed that of the four courses taught, the Listening and Speaking classes would most likely contain pronunciation components.

One week in a 14-week semester was chosen at random for the observations. The focus was to see how often pronunciation teaching was occurring within any given week. Pronunciation categories that aligned with the categories chosen from the study mentioned above (Foote, et al., 2013) were chosen for the observation; specifically, we were looking for pre-planned pronunciation lessons, spontaneous pronunciation lessons, recasts (focusing on correcting the pronunciation of the student's errors), and prompts (in this case, teacher-provided cues that an error had occurred in the student's pronunciation, without actually providing the correct form) (Gooch, Saito, & Lyster, 2016).

These observations revealed that, during a four-day school week of 260 minutes, (65-minute classes each day), an average of 60 minutes per week was devoted to pre-planned pronunciation lessons in each class. Most of these lessons focused on suprasegmentals including intonation, stress, and rhythm and were addressed daily. Two lessons were on specific segmentals because a student in that class had asked a question about a particular sound. These segmental lessons (in two different classes) were approximately 20-30 minutes in length. The results of this observation showed that pronunciation instruction involving suprasegmentals was being provided in the listening and speaking classes. However, the segmental sounds were only taught after a student asked a question about a particular vowel or consonant sound. To answer the student's question, the teacher prepared a lesson for the next day explaining the particular segmental aspect. The amount of time spent on suprasegmentals was more than we expected, based on the above-mentioned research (where during a 12-day observation not one episode of suprasegmentals was taught); however, this may have been due to the teachers being aware of the purpose of the observation.

We also observed a beginning English listening and speaking class for one week. In the 260 minutes of instruction, 65 minutes were devoted to pronunciation teaching. Monday included 30 minutes of instruction on stress (suprasegmental). Tuesday included 20 minutes of instruction on rhythm and intonation (suprasegmentals). Wednesday included 15 minutes of suprasegmentals (intonation, rhythm, and stress). Thursday contained no pronunciation instruction. There was no instruction on specific segmentals (vowel/consonant sounds) on any of the school days. None of the classes contained any type of correction of inaccurate pronunciation from the students (recasts and prompts). (See Table 1).

Table 1. Minutes Spent on Pronunciation Instruction During a 260 Minute Week of Class

Class	Segmentals	Suprasegmentals	Recasts/Prompts
Listening/Speaking Advanced 1	20	35	0
Listening/Speaking Advanced 2	35	30	0
Listening/Speaking Beginning	0	65	0

The teachers of the advanced classes were known to provide pronunciation lessons in their classes from time to time. We wanted to see how often pronunciation teaching was occurring when teachers planned pronunciation lessons as part of their curriculum. We had no preconceived notions of the beginning teacher's approach towards pronunciation teaching.

Levis & Grant (2001) suggested that pronunciation instruction can be integrated into many ESL classes, but it is more apt to be woven into oral communication courses, especially speaking courses. This suggestion guided the choices for the next wave of observations which included one listening and speaking class, two linguistic accuracy (grammar) classes, and one writing and grammar class of varying levels. These chosen classes were observed, unannounced, for one day only (65 minutes). This was to catch a "snapshot" of possible pronunciation teaching in language classes at any given time. Two different classes of University Preparation Linguistic Accuracy (Advanced 3) were observed for one day. Although well-prepared

language lessons were given, pronunciation instruction was not addressed in pre-planned nor incidental lessons and no corrective feedback (such as recasts and prompts) was provided. An Academic B Listening and Speaking (Advanced 2) class devoted 10 minutes to segmentals on one day. In a Foundations B Writing and Grammar (Beginning 2) class, seven pronunciation-related recasts were made while students read aloud. No other pronunciation instruction was given. The teachers of these classes were unaware of the purpose of the observation. (See Table 2).

Table 2. Minutes Spent on Pronunciation Instruction During One 65-Minute Class.

Class	Segmentals	Suprasegmentals	Recasts	Prompts
Linguistics Accuracy Advanced 3	0	0	0	0
Linguistics Accuracy Advanced 3	0	0	0	0
Listening/Speaking Advanced 2	10	0	0	0
Writing/Grammar Beginning 2	0	0	7	0

At this particular institution, it seemed that suprasegmentals *did* get taught in pre-planned lessons, while the segmental aspects were addressed only after a student proposed a question about a particular sound production. However, except for one, the teachers did not correct the students' mispronunciation of words (recasts) nor provide clues for student-initiated corrections (prompts).

These teachers had been educated in a TESOL MA program and all had been teaching for a minimum of four years except one, who had been teaching for two years. These seven teachers were asked how they felt about their own teaching of pronunciation. All teachers said they felt inadequate teaching pronunciation due to lack of sufficient training in this area. Two mentioned that even though they knew some things about pronunciation teaching, they still felt that more education would be beneficial. Four of the seven teachers said they rarely taught pronunciation in their classes. If a student asked a question about pronunciation, the teacher would address it, however that was the extent of the teacher's pronunciation teaching. The others did teach it as indicated. Even though pronunciation teaching was observed in their classes, the teachers stated they felt uncomfortable teaching it.

At the ELC, suprasegmentals rather than segmentals were taught more, contrary to studies that show the opposite tended to be true as stated above in the study done in Quebec, Canada (Foote, et al., 2013). The focus on suprasegmental teaching shows the progressive nature of pronunciation teaching at the ELC. However, it seemed that both studies of English language institutions (Quebec, Canada and Provo, Utah) showed the ESL programs were lacking in a complete pronunciation curriculum that would include a more balanced emphasis on segmentals as well as suprasegmentals. As Derwing, et al. (1998) stated,

Attention to both global (prosodic) and segmental concerns benefits ESL students. In the case of a communication breakdown caused by a mispronunciation, a student who has received segmental training might be able to focus on the mispronounced form in a self-repetition. On the other hand, global instruction seems to provide the learner with skills that can be applied in extemporaneous speech production, despite the need to allocate attention to several speech components. (p. 407)

The seven ELC teachers interviewed were asked what they felt would be helpful at this point of their careers to aid them in pronunciation teaching. Three of the teachers suggested that videos be made by the teachers at the ELC showing how and what to teach in pronunciation. All teachers agreed that having access to videos rather than attending in-service meetings would be the most useful to them given their time constraints as busy fully-employed ESL teachers.

### **Possible Solutions**

Four possible solutions to the problems described above (including teachers' feelings of inadequacy) will be discussed here.

# **Pronunciation Pedagogy**

The first solution to the lack of pronunciation teaching in ESL classrooms is directed towards more thorough teacher preparation. Pronunciation pedagogy needs to become part of ESL teacher-preparation curricula. TESOL teacher-education programs need to be "firmly rooted in existing research" about pronunciation teaching and learning (Derwing & Munro, 2005, p. 392). This action will ensure that teachers-in-training will realize the need to teach pronunciation and through their TESOL program become prepared to do so. However, improving ESL teacher-preparation programs does not address the needs of the thousands of practicing teachers, most of whom are extremely busy with preparing and teaching their classes. For them, engaging in university-based teacher development related to pronunciation instruction is not a high priority or even a possibility.

# **Computer Assisted Pronunciation Teaching**

A second possible solution is utilizing CAPT (Computer Assisted Pronunciation Teaching) programs that allow students to study pronunciation on their own. CAPT seems promising because it allows teachers to provide pronunciation lessons beyond their own instructional abilities (Levis, 2007). Nevertheless, there are weaknesses in most current CAPT programs. For one, computer language programs tend to exploit the strengths of the computer (ability to record, to show graphics, to use sounds, to entertain, etc.) rather than address the real needs of L2 pronunciation learners (Neri, Cucchiarini, Strik, & Boves, 2002). These programs need to be rooted in research-based models of L2 pronunciation learning and teaching (Pennington, 1999).

In addition, CAPT programs suffer from the inability to give accurate and automatic feedback on pronunciation production (Levis, 2007). Most programs that include ASR (automated speech recognition) also are not able to recognize speech from different speakers (Cox & Davies, 2012). Henrichsen et al. (2018) reviewed 21 different CAPT and ASR programs (websites, software, and books). They found that even though there are strengths found in each program, there are many variables to consider. For example, some of the sites focus only on segmentals, and some focus only on suprasegmentals. Some of the sites need to be used with textbooks and still other sites are used with an instructor. In addition, a large number of CAPT programs exist, and finding quality programs (in terms of both pedagogy and technology) can be time-consuming. Furthermore, some teachers use CAPT ineffectively because of a lack of

training in pronunciation pedagogy and technology (Levis, 2007). Nevertheless, technology in this area is constantly improving (McCrocklin, 2015) and the usefulness of CAPT and ASR seem to be on the rise.

Using CAPT and ASR programs may address some of the needs of the students, but it does not enhance the ability of ESL teachers to teach pronunciation in their classrooms.

# **Creating Videos**

Another solution involved the teachers who were interviewed at the ELC who offered the idea of videos to watch to become educated in pronunciation techniques. The first suggestion was to create their own videos by using the teachers at the ELC, writing a script, and filming the lesson being taught. However, the question soon arose as to the practicality of this venture which included the time it would take to produce the videos, and their quality once the time had been invested.

# **Existing Materials**

A fourth possible solution is to help teachers feel comfortable using existing pronunciation-teaching resources. In this regard, MacDonald (2002) urged,

Promote existing materials. It is recommended that existing materials be promoted and made available to teachers....To do this, they need resources and direction on how best this can be done. The recommendations thus made have been made with the view to overcoming teacher reluctance in the area of pronunciation teaching and encouraging teachers...to teach pronunciation confidently, effectively, and more often. (p.14)

To summarize thus far, our overview of research literature concludes that many ESL teachers generally want to help their students reach their pronunciation improvement goals but they often feel they lack the knowledge to be confident in helping L2 learners with their pronunciation struggles (Foote, et al., 2011).

### **Most Workable Solution**

Following recommendations from researchers to use existing materials (MacDonald, 2002) and in an attempt to address teachers' concerns about time constraints, a concerted effort was made to utilize the multitude of ESL pronunciation videos available online, focusing *not* on the thousands of online pronunciation videos for students to learn from, but rather videos that show *teachers* how to teach pronunciation to students.

Due to the large quantity of English-pronunciation videos available online, choosing the optimal or most appropriate ones can be a daunting task for teachers who are not trained in ESL pronunciation instruction and have little time available to hunt for videos online. Therefore, the *English Pronunciation Guide: ESL Teacher's Guide to Pronunciation Teaching* (Cox & Henrichsen, 2017) was created. It not only links to videos designed for teachers who want to teach English pronunciation, but also organizes these video links into simple, logical categories to make them easily accessible. In addition, all videos available through this website have been previewed so that teachers accessing this resource will be led to only those videos that meet a set of criteria aimed at giving teachers explicit pronunciation teaching information.

# **Development: Criteria for Selecting Videos**

Criteria for choosing the videos to be included were based on the research showing the importance of suprasegmentals and segmentals in learning English (Catford, 1987). Suprasegmentals, including voice quality, rhythm, stress, and intonation are important components in a pronunciation curriculum. Curriculum designers have searched for more effective ways to teach pronunciation communicatively and concluded that suprasegmentals being taught in a short-term course will probably result in the most improvement in the intelligibility of non-native speakers' pronunciation.

For instance, in 1992, McNerney and Mendelsohn stated,

...a short-term pronunciation course should focus first and foremost on suprasegmentals as they have the greatest impact on the comprehensibility of the learners' English. We have found that giving priority to the suprasegmental aspects of English not only improves learners' comprehensibility but is also less frustrating for students because greater change can be affected in a short time. (p.186)

Segmentals are crucial as well, especially when high frequency functional load sounds are targeted (Catford, 1987). Certain types of errors carry greater weight than others. For example, substituting /t/ for / $\theta$ / (ting for thing) does not interfere as much with intelligibility as substituting /b/ for /p/ (bat for pat) (Derwing & Munro, 2005).

Criteria for choosing the videos included focus on areas of English pronunciation where research suggests the greatest improvements in English pronunciation produce the greatest gains in intelligibility as previously determined by leading pronunciation experts (Avery & Ehrlich, 1992; Catford, 1987; Derwing & Munro, 2005). Another guiding consideration was to favor videos that addressed the pronunciation difficulties experienced by the largest L1 English-learner groups—namely speakers of Chinese, Japanese, Korean, Portuguese, and Spanish. Suprasegmentals were given special attention due to their importance in improving ESL learners' intelligibility, but online videos designed to help teachers teach commonly mispronounced English vowels and consonants were also included. All videos were chosen to increase the teachers' ability to give direct feedback to their students.

After viewing and evaluating approximately 300 online pronunciation-teaching videos, we chose 76 that we found to be the most helpful, according to criteria explained here. The videos chosen met approximately 90% of the criteria below before they were considered for the website.

### The criteria were as follows:

- 1. Fit with widely recognized categories of ESL learners' pronunciation difficulties, as described in *Teaching American English Pronunciation* (Avery & Ehrlich, 1992)
- 2. Address segmentals (vowels/consonants) with high functional load (Catford, 1987)
- 3. Focus on areas of difficulty associated with many ESL learners' L1s (Chinese, Japanese, Korean, Portuguese, Spanish) (Avery & Ehrlich, 1992)
- 4. Are quick and easy for non-pronunciation teachers to understand (not overly technical)
- 5. Are interesting, even entertaining
- 6. Feature a variety of presenters
- 7. Provide visual support showing articulatory positions and movements (mouth, tongue, etc.)
- 8. Use a speech rate targeted towards teachers, not L2 learners
- 9. Provide viewer involvement—things to learn and DO, not just watch

- 10. Run from one to ten minutes in length (although some longer exceptions were allowed because of strengths in other criterion areas)
- 11. Present highly useful pedagogical skills for the targeted pronunciation feature in a short amount of time.
- 12. Utilize a variety of approaches to teaching the desired pronunciation goals so as to fit different teachers' teaching styles and reach ESL learners with varied learning styles.
- 13. Are designed to show teachers how to teach pronunciation to students.

# **Design Phase**

The website development platform chosen was Weebly Website Creator. After trying another website creator and finding it did not serve the needs of housing the pronunciation videos, Weebly was selected due to it being easy, intuitive, and functional as needed.

A visual background was chosen for the homepage that represented any street around the world where English may be learned. Since the site would contain many pronunciation videos, a simple way to organize them that would make the videos accessible to teachers was to group them according to two main areas of pronunciation identified by pronunciation teaching experts; namely, segmentals and suprasegmentals (Catford, 1987; Derwing & Rossiter, 2002); Avery & Ehrlich, 1992). The colors, font size, page shapes, tabs and buttons for each of the web pages were adjusted throughout the entire design and development process. Revisions were made after users' survey comments were taken into consideration in the Evaluation Phase.

# **Description of Website**

The purpose of the videos that the English Pronunciation Guide: ESL Teacher's Guide to Pronunciation Teaching website (at <a href="www.englishpronunciationguide.weebly.com">www.englishpronunciationguide.weebly.com</a>) links users to is to give "non-pronunciation teachers" (with little or no training, experience, skill, or confidence in ESL pronunciation instruction) the instructional models, guidance, and encouragement they need in order to gain the competence and confidence that many ESL teachers state they lack (Yates, 2001).

### **Application**

The intent of the website is that after teachers have recognized their students' pronunciation needs, they will search the website to find online videos related to those needs [1]. At the website, they can select, link to, and watch several videos, and then incorporate the instructional models and content into their own teaching style. Ideally, teachers will combine techniques as appropriate and develop pronunciation lessons designed to help students improve their pronunciation. Put more systematically and in greater detail, we envision teachers following these steps:

- 1. After noticing and identify their ESL students' pronunciation needs, go to the website: www.englishpronunciationguide.weebly.com (see Figure 1).
- 2. Choose the "Segmentals" or "Suprasegmentals" section (see Figure 2), whichever corresponds with the needs of their students.
- 3. Go to the chosen target area and then choose from three to eight videos in that target area (see Figure 3) to view and learn from.
- 4. Practice and prepare their own lessons based on the models and content they have learned about in the videos they selected and viewed.
- 5. Implement their lessons in the classroom with creativity and confidence.

6. Try variations of the methods presented in the videos to reach students with different learning styles.

# **Website Pages**

The English Pronunciation Guide: ESL Teacher's Guide to Pronunciation Teaching consists of three main pages; Home, Segmentals, and Suprasegmentals. Under the Segmentals tab there are seven segmental feature buttons from which to choose. There are five different prosodic aspects that can be chosen on the Suprasegmentals page. Each page will be discussed below.

# The Home Page

The home page of the website (see Figure 1) explains the theory and research on which the creation of the website was founded, as described in this paper. This section is designed to give users confidence in the credibility of the videos included in this website. The home page also contains information about the authors' credentials and backgrounds.

SUPRASEGMENTALS



SEGMENTALS

#### **ESL TEACHERS' GUIDE TO PRONUNCIATION TEACHING**

This pronunciation teaching guide is an annotated index to selected pronunciation-instruction videos and other resources that are available online. Using this index, ESL teachers with little or no preparation in pronunciation instruction can quickly find training resources to increase their competence and confidence when they help students overcome English pronunciation challenges.

- INTRODUCTION
- DEVELOPMENT
- CRITERIA FOR SELECTING VIDEOS
- APPLICATION FOR TEACHERS
- CONCLUSION
- REFERENCES
- AUTHORS' INFORMATION

Figure 1. Home Page of Website.

### The Segmentals Page

The Segmentals page has buttons featuring prominent vowels and consonants to master for intelligible pronunciation. These particular segmentals were chosen based on their functional load (Catford, 1987) and their inclusion in standard pronunciation teaching books (Avery & Ehrlich, 1998; see Figure 2). Clicking on one button takes the teacher to several videos containing instruction on that particular segmental sound.



Figure 2. Segmentals Directory Page.

A complete list of available videos for each targeted sound on the Segmentals page is listed in Table 3. The information in that table comes from Avery and Ehrlich (1992) and Catford (1987).

**Table 3. Segmentals Page Content.** 

Category	Title and Content of Videos on Website	
Consonants	Voiced/Unvoiced Stops: b/p, d/t and g/k Sounds of t/d Advanced Lesson-Final Consonant An Overview of Consonants	Buildup of Air and Release /m/ Sound L and R L and N G and K
American R	Producing /r/ sounds How to Say "World" Words that Start with "Wor"	Examples of /r/ sounds Placement of Tongue Movement of Tongue
Vowels Tense/Lax	Short Vowels and IPA Close-up of Mouth /a/ Beat vs. Bit Schwa vs. /a/	Ship vs. Sheep Three Sounds of "A" /uw/ Sound /a/ vs. /e/ and schwa
TH Sounds	Using Tip of Tongue Using Straw Voiced/ Voiceless "The" instead of "Duh"	Linking to "th" Using Mirrors Tongue Twisters
Aspiration	Pronounce /p/, /t/, and /k/ /p/ and /b/ Sounds Focus on /p/	Aspirated /t/ Tissue Use
Past Tense	Voiced/Unvoiced Explanations of -ed Endings Examples of Past Tense Words	Sound is One of Three Categories
Voiced/ Unvoiced	Explanations of -ed Endings Examples of Past Tense Words	Sound is One of Three Categories
Initial Clusters, Blends, and Digraphs	Definition of Clusters Clusters Starting with "s" TR Clusters	BR Clusters Digraph Stories ch and sh

After users choose the Consonant button on the Segmentals page, a variety of videos concerning difficult consonant pronunciations appear. (See Figure 3.)

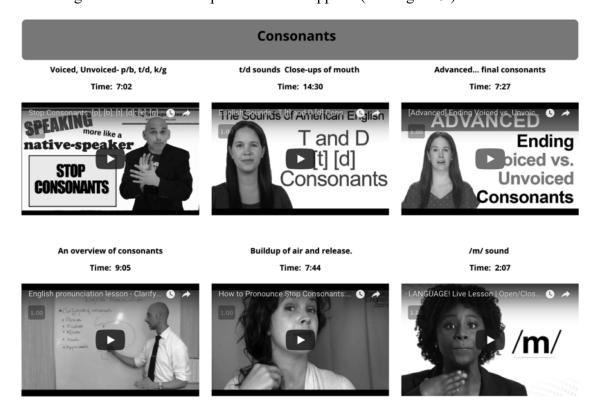


Figure 3. Video Content on the Consonant Button of the Segmentals Page.

## The Suprasegmentals Page

Clicking on the Suprasegmentals page takes the teacher to the important components of prosodic teaching that aid in the intelligibility of ESL students as identified in the Catford (1987) and Avery and Ehrlich (1992). (See Figure 4.)

Suprasegmentals

WORD AND SENTENCE STRESS

REDUCTIONS

LINKING

INTONATION

RHYTHM

Figure 4. Suprasegmentals Directory Page

Table 4 lists the categories on the Suprasegmentals page and the contents within each category. Much of this information is adapted from Ferreiro and Luchini (2015).

**Table 4. Suprasegmentals Page Content.** 

Category	Title and Content of Videos on Website
Word and Sentence Stress	Word and Sentence Stress Clapping and Elastic Band Three Syllable Word Stress Stress Vowels Sentence Stress/Content Words Functional Word Stress Stress Changes Meaning
Reductions	Reduction Overview Reducing "ing" Reducing "h" Reducing "of" Reducing "want to" and "to" Reducing "should of", "could of", and "would of"
Linking	Consonant to Consonant Consonant to Vowel Word Linking
Intonation	Varying Pitches Rising and Falling Intonation Rising and Falling Questions Questions Singing Scales
Rhythm	Imitation Pausing Pronunciation Clapping Using Poems Jazz Chants Children's Songs and Chants Weak and Strong Beats

When users find the needed lesson, (for example, Word and Sentence Stress), they click on the button and the videos for teaching that prosodic feature appear as seen in Figure 5. Under each button are three to eight videos for pronunciation training.

# **Word and Sentence Stress**

Clapping and an elastic band

Time: 5:11

Three-syllable word stress

Time: 5:34

Stress vowels-Using body

Time: 9:57







Sentence Stress

Time: 6:05

Function of word and stress

Time: 9:57

Stress changes meaning

Time: 8:04







Figure 5. Video Content of the Word and Sentence Stress Button of the Suprasegmentals Page.

### **Evaluation**

Once the website was functional and the different videos had been selected, another important step in the process was an evaluation of the product by actual ESL teachers. A survey about the website and the link to the website were sent to 92 past and present ESL teachers from the ELC in Provo, Utah as suggested by the supervisor of the ELC. Forty-eight responses were received, for a response rate of 49%. There were two parts to the evaluation, which will be discussed below.

## **Quantitative Data and Analysis**

The quantitative data generated from the survey is analyzed and listed below. The questions and respondents' answers concern the website's usability.

Questions and Data. Seven questions were formulated and answered to establish the appropriateness and usefulness of the website. Forty-eight responses were recorded.

Question 1. Considering the content of this website, how appropriate is the URL (address)? Thirty-three responses (69%) indicated that the URL was extremely appropriate, 13 responses (27%) indicated that the URL was somewhat appropriate, one response (2%)

indicated that the URL was somewhat inappropriate, and one response (2%) indicated that the URL was inappropriate. (See Figure 6). Zero of the responses indicated that the URL was extremely inappropriate.

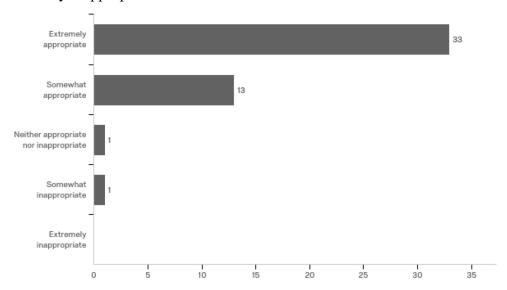


Figure 6. Frequency of Responses to the Question: Considering the Content of this Website, How Appropriate is the URL (address)?

The majority of the respondents' answers showed that the URL address was extremely appropriate; therefore, the address seemed to reflect the intended message, and it was left unchanged.

Question 2. How well does the title of the website reflect the content? The answer to this question helped us to solidify the website's title (see Figure 7). Twenty-two responses (46%) indicated that the title of the website reflects the content extremely well, 19 responses (40%) indicated that it reflects it very well, and seven responses (15%) indicated that it reflects it moderately well. Zero responses indicated that the title of the website reflects the content slightly well or not well at all.

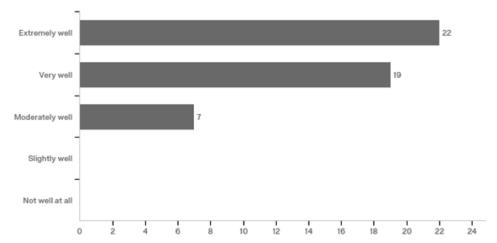


Figure 7. Frequency of Responses to the Question: How Well Does the Title of the Website Reflect the Content?

The respondents' answers indicated that the website's title was appropriate to the content of the website, consequently, no alteration of the website title was made.

**Question 3.** Is the layout of the website user-friendly? (see Figure 8). Twenty-seven of the responses (56%) indicated that the layout of the website was definitely user-friendly, 14 responses (29%) indicated that it was probably user-friendly, and seven responses (15%) indicated that it may or may not be user-friendly. There were no responses in the "probably not" or "definitely not" categories.

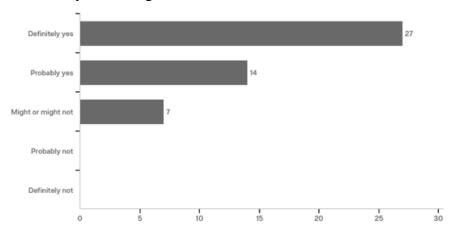


Figure 8. Frequency of Responses to the Question: Is the Layout of the Website User-Friendly?

The respondents' feedback was generally positive; however some survey participants reported a design flaw in terms of navigation of the website. Based on the open-ended responses, which are described later in the document, the Suprasegmentals tab was hidden in the More tab and needed to be brought to the front of the Home page. This would put the Segmentals and the Suprasegmentals tabs next to each other. This action was implemented.

Question 4. Did you find the pronunciation help you needed? Sixteen responses (34%) indicated they found the pronunciation help they needed, 24 responses (50%) indicated they probably found the help they needed, and seven responses (15%) indicated that they may or may not have found the pronunciation help needed (see Figure 9). Zero responses indicated a "probably not" or a "definitely not" response to finding the pronunciation help needed.

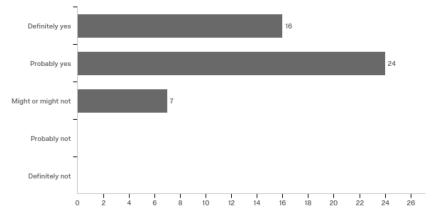


Figure 9. Frequency of Responses to the Question: Did You Find the Pronunciation Help You Needed?

The summary of the responses to this question indicated that the website met the needs of the majority of the users. It was concluded the website was functioning as designed.

Question 5. How likely are you to use this website? Responses to this question were important because the website was intended as an easy helpful resource (see Figure 10). Forty-seven responses were received. Nineteen responses (40%) indicated they were extremely likely to use this website, nineteen responses (40%) indicated they were moderately likely to use it, five responses (11%) indicated they were slightly likely to use it, and zero indicated neither likely or unlikely. Two responses (4%) indicated they were slightly unlikely to use it, and one response (2%) indicated he was extremely unlikely to use the website.

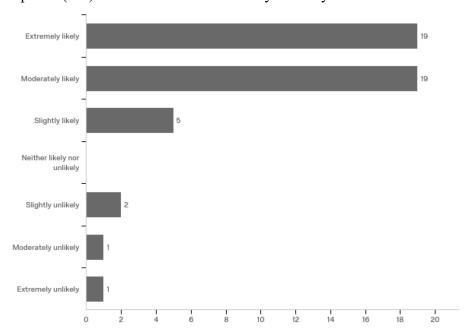


Figure 10. Frequency of Responses to the Question: How Likely are You to Use this Website?

The majority of the respondents' answers showed that they would use this website. However, there were four respondents who indicated they were unlikely to use it. Unfortunately, the survey participants were not asked to explain their answers, but responses to the open-ended questions may provide some insight. Those who indicated they were not likely to use the website may have concerns about its limited scope. As mentioned later, some responses suggested changes that were beyond the scope of the project such as teaching tips, better quality videos, expanded descriptions, and others. Other respondents may have felt adequately prepared to teach pronunciation and therefore felt no need to use the resources on the website.

Question 6. Did you find the resources here to be useful? (see Figure 11). Twenty-eight responses (56%) indicated they found the resources to be useful, seventeen responses (36%) indicated they probably found them to be useful, and 2 responses (4%) indicated they may or may not have found the resources to be useful. Zero indicated they probably didn't or definitely didn't find the resources to be useful.

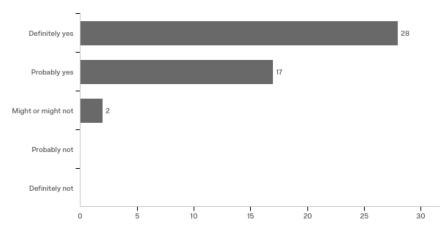


Figure 11. Frequency of Responses to the Question: Did You Find the Resources Here to be Useful?

It was concluded that the video resources found on the website were considered to be useful by the majority of the users.

Question 7. On a scale from 0-10, how likely are you to recommend The English Pronunciation Guide to a friend or colleague? Net Promoter Score (NPS) measures the loyalty that exists between a provider and a consumer. The provider can be a company, employer, or any other entity. The provider is the entity that is asking the questions on the NPS survey. The consumer is the customer, employee, or respondent to an NPS survey. The Net Promoter Score is determined based on answers to one question: "How likely is it that you would recommend our company/product/service to a friend or colleague?" (Reichheld, 2003; Hyken, 2016). In our case, the question was, "How likely is it that you would recommend The English Pronunciation Guide to a friend or colleague?" (See Figure 12).

Typically, the scoring is based on a score from 1 to 10. Those who respond with a score of 9 to 10 are called Promoters, and are considered likely to demonstrate beneficial behaviors, such as buying more, remaining customers for longer, and making more positive referrals to other potential students, as in this case. Subjects surveyed who respond with a score of 0 to 6 are labeled Detractors, and they are believed to be less likely to demonstrate the value-creating behaviors. Responses of a 7 to 8 are labeled Passives, and their behavior falls in the middle of Promoters and Detractors. The Net Promoter Score is determined by subtracting the percentage of students who are Detractors from the percentage of students who are Promoters. The range of scoring is from -100 (all Detractors) to +100 (all Promoters).

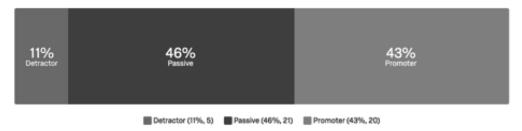


Figure 12. Frequency of Responses to the Question: On a Scale From 0-10, How Likely are You to Recommend the English Pronunciation Guide to a friend or colleague?

For purposes of calculating a Net Promoter Score, Passives count towards the total number of respondents, thus decreasing the percentage of detractors and promoters and pushing the net score towards zero (Hyken, 2016; Reichheld, 2003). A Net Promoter score of 50 or higher is considered excellent. The Net Promoter Score calculated from data provided by those who reviewed the website was positive at 32 – 18 points short of the standard for being considered excellent, but still marking the product as being potentially very successful.

Looking at the Net Promoter Score in isolation from the individuals' responses doesn't paint the complete picture. When looking at the results of a 10-point scale more traditionally, 89% of the participants responded with a 7 or higher to the aforementioned question. In fact, the average response was approximately 8.2 indicating that the majority of the reviewers were likely to recommend this product to their colleagues. While the Net Promoter Score and average rating to the question provide a unique insight into the future use of the website and its potential for recommendation to other practitioners, answers to the qualitative question provide us with more focused suggestions for improvement from all reviewers regardless of their likelihood to recommend the website.

### **Qualitative Evaluation Results**

The survey generated many helpful and insightful comments. In the analysis of the qualitative, open-responses, the comments were grouped by the primary researcher into categories according to the overall sentiment. Seidel (1998) described qualitative data analysis as having three phases: noticing, collecting, and thinking. Using this concept, the primary research caused us to notice salient concepts, collect them into categories or themes, and then think about the implications of these salient themes. An external second rater also read and evaluated the comments and identified a similar set of categories. Comparison of the two sets of categories revealed 98% agreement which demonstrated a high degree of dependability. Listed first are the comments that were taken under consideration that were implemented. Next are the comments that were taken under consideration, were not feasible to implement, and were discarded for the reasons listed.

The qualitative survey question read as follows: "This is a work in progress. Your comments are valuable to us to improve this website. In your opinion, what is missing from this website?"

**Implemented Suggestions**. The following suggestions generated from the survey of teachers were implemented in adjusting the website content.

- Create a separate tab for suprasegmentals so that it is equal to the segmentals page.
- Focus is too heavy on segmentals. Need more suprasegmentals.
- Put the information that is on the ABOUT THIS SITE page on the HOME page.
- Add videos that teach reductions, blending, and vowel to vowel linking.
- Tell who the authors are.
- Change the essay style information page to bullets.
- Put the links on each page.

**Discarded Suggestions and Reasons**. The following comments and suggestions were considered, but disregarded due to the reasons listed. (See Table 5.)

**Table 5. Discarded Recommendations and Responses** 

Recommendation	Response
Add a short summary of each video.	Each video is labeled with the sound it targets and the time length. Longer text description would make the site look cluttered.
Include materials other than videos.	This suggestion is beyond the scope of this project. This website is designed and intended only for videos. There are numerous resources that provide lists of books and other resources.
The videos look unprofessional.	We used existing online videos (MacDonald, 2002). An effort was made to select videos that were professional in their production. There is a wide range of videos to appeal to many learning styles. Teachers can choose the videos that accommodate their personalities.
It might be nice to have a contact page so more videos can be added by other teachers.	Yes, this would keep the web page from getting stale. However, the idea is to have a limited number of targeted videos for teachers to easily choose from. They will be updated quarterly by the primary author.
Real in-class teaching tips might be helpful.	This change would go beyond the intended scope of this project. For this project the video <i>is</i> the teaching tip. Teachers should watch several videos and create their own method of teaching.

After careful consideration was given to each comment, improvements were made and the website was formatted more clearly which made it easier to use.

### Limitations

During the initial analysis of the observations made at the ELC of pronunciation teaching, there may have been bias due to possible teacher knowledge of the purpose of the observation. It seems that when teachers were observed with no notice, there was not a prepared pronunciation lesson. However, when the purpose of the observation was not carefully guarded from the teachers, there were pre-planned lessons.

A second limitation was that the surveyed population was relatively small. Future use and surveys of the website could be solicited from a variety of ESL programs to assess the effectiveness of the site.

Another limitation of this project is that new videos will constantly be put online and added to the plethora of videos already available. Therefore, the website will need to be updated as time goes on if it is to stay effective. Current plans are for the videos to be reviewed quarterly to allow for any new videos to be evaluated and possibly chosen to replace others or strengthen certain sections. In addition, future studies should be done to investigate the possible improvement in pronunciation teaching due to the recent attention given to this deficit language component.

### **Future Recommendations**

A product similar to this online pronunciation guide in the future should include a guide to other print resources in pronunciation and other areas, as suggested by the responses to the user-survey. The site was not intended to be an all-inclusive resource. On the contrary, it targeted a small number of the resource materials available. Grouping the resources into categories minimizes the overload of available materials and allows teachers to focus on one type of resource. It would be beneficial to have resources sub-divided so educators could choose the type of resource that fits their learning and teaching style. In addition, future studies might be done to investigate the possible improvement in teachers' perception and confidence in their own pronunciation teaching after having used this website.

## **Conclusion**

Our hope is that teachers who use the English Pronunciation Guide: ESL Teachers' Guide to Pronunciation Teaching Using Online Resources will feel empowered by the quality, directness, and ease of teaching high functional load sounds and prosody that the video models provide. Giving users a reduced number of pre-selected, high-quality pronunciation-teaching videos to choose from will hopefully reduce the overwhelming task of sorting through the countless videos online by themselves. The fact that pre-selected videos are organized into clear, problem-oriented categories may make finding the right instructional model and correct linguistic content easier and may boost teachers' motivation to view the pre-selected videos. It is hoped that by implementing what they learn from the video models, "non-pronunciation teachers" may, in turn, be empowered to teach the needed pronunciation lessons in their classrooms with better instructional procedures, greater confidence, and increased effectiveness.

# References

Algahazo, S. (2015). Advanced EFL learners' beliefs about pronunciation teaching. *International Education Studies*, *8*(11), 63-76.

Avery, P., & Ehrlich, S. (1992). *Teaching American English pronunciation*. New York: Oxford University Press.

Bakar, Z. A., & Abdullah, M. R. (2015). Importance of correct pronunciation in spoken English: Dimension of second language learners' perspective. *Pertanika Journal of Social Sciences and Humanities*, 23(S), 143-158.

Burgess, J., & Spencer, S. (2000). Phonology and pronunciation in integrated language teaching and teacher education. *System*, 28, 191-215.

Catford, J. C. (1987). Phonetics and the teaching of pronunciation: A systemic description of English phonology. In J. Morley (Ed.), *Current perspectives on pronunciation* (pp. 83-100). Washington, DC: TESOL.

Cox, J., & Henrichsen, L. (2017). *English pronunciation guide: ESL teachers' guide to pronunciation teaching*. Retrieved from https://englishpronunciationguide.weebly.com/.

Cox, T., & Davies, R. S. (2012). Using automatic speech recognition technology with elicited oral response testing. *CALICO Journal*, *29*, 601-618.

Derwing, T. M. (2008). Curriculum issues in teaching pronunciation to second language learners. In J. G. H. Edwards, & M. L. Zampini (Eds), *Phonology and second language acquisition* (pp. 347-369). Amsterdam: John Benjamins Publishing Company.

- Derwing, T. M., Diepenbroek, L. G., & Foote, J. A. (2012). How well do general-skills ESL textbooks address pronunciation? *TESL Canada Journal*, 30(1), 22-45.
- Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, 39, 379-397.
- Derwing, T. M., & Munro, M. J. (2009). Putting accent in its place: Rethinking obstacles to communication. *Language Teaching*, 42, 476-490.
- Derwing, T. M., Munro, M. J., & Wiebe, G. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning*, 48, 393-410.
- Derwing, T. M., & Rossiter, M. (2002). The effects of pronunciation instruction on the accuracy, fluency, and complexity of L2 accented speech. *Applied Language Learning*, 13, 1-17.
- Ferreiro, G. M. & Luchini, P. L. (2015). Redirecting goals for pronunciation teaching: A new proposal for adult Spanish-L1 Learners of English. *International Journal of Language Studies*, 9, 50-68.
- Foote, J. A., Holtby, A. K., & Derwing, T. M. (2011). Survey of the teaching of pronunciation in adult ESL programs in Canada. *TESL Canada Journal*, 29(1), 1-22.
- Foote, J. A., Trofimovich, P., Collins, L., & Urzúa, F. S. (2013). Pronunciation teaching practices in communicative second language classes. *The Language Learning Journal*, 44(2), 181-196.
- Franklin, A., & McDaniel, L. (2016). Exploring a phonological process approach to adult pronunciation training. *American Journal of Speech-Language Pathology*, 25, 172-182.
- Fraser, H. (2000). Coordinating improvements in pronunciation teaching for adult learners of English as a second language. Canberra, Australia: Department of Education, Training and Youth Affairs.
- Gilakjani, A. P., & Ahmadi, M. R. (2011). Why is pronunciation so difficult to learn? *English Language Teaching*, 4(3), 74-83.
- Gooch, R., Saito, K., & Lyster, R. (2016). Effects of recasts and prompts on L2 pronunciation development: Teaching English /x/ to Korean adult EFL learners. *System*, 60, 116-127.
- Grant, L. (2014). Pronunciation Myths. Ann Arbor, MI: University of Michigan Press.
- Grim, F., & Sturm, J. (2016). Where does pronunciation stand in the 21st century foreign language classroom? Educators' and learners' views. In J. Levis, H. Le, I. Lucic, E. Simpson, & S. Vo (Eds). *Proceedings of the 7th Pronunciation in Second Language Learning and Teaching Conference, Dallas, TX*, October, 2015 (pp. 51-59). Ames, IA: Iowa State University.
- Henrichsen, L., Blanco, K. D., Carreño, S., Carter, S., Decker, L., Fry, L.,...Zhao, K. (2018). Online resources for learners and teachers of English language pronunciation. TESL Reporter 51(1), 23-89.
- Henrichsen, L. & Stephens, C. (2016). Advanced adult ESL students' perspectives on the benefits of pronunciation instruction. In J. Levis, R. Mohammed, M. Qian, & Z. Zhou (Eds.). *Proceedings of the 6th Pronunciation in Second Language Learning and Teaching Conference. Santa Barbara, CA* (pp. 197-205). Ames, IA: Iowa State University.

Hyken, S. (2016). How effective is net promoter score (NPS)? *Forbes Magazine*, Dec. 3, pp.12-13. Retrieved from <a href="https://www.forbes.com/sites/shephyken/2016/12/03/how-effective-is-net-promoter-score-nps/#5e8702d323e4">https://www.forbes.com/sites/shephyken/2016/12/03/how-effective-is-net-promoter-score-nps/#5e8702d323e4</a>.

Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly*, *39*, 369-377.

Levis, J. M. (2007). Computer technology in teaching and researching pronunciation. *Annual Review of Applied Linguistics*, 27, 184-202.

Levis, J. M., & Grant, L. (2001). Integrating pronunciation into ESL/EFL classrooms. *TESOL Journal* 12(2), 13-19.

MacDonald, S. (2002). Pronunciation—views and practices of reluctant teachers. *Prospect*, 17(3), 3-18.

McCrocklin, S. M. (2015). Pronunciation learner autonomy: The potential of automatic speech recognition. *ScienceDirect*, *57*, 25-42.

McNerney, M., & Mendelsohn, D. (1992). Suprasegmentals in the pronunciation class: Setting priorities. In P. Avery & S. Ehrlich (Eds.), *Teaching American English pronunciation* (pp. 185–196). New York: Oxford University Press.

Munro, J. M., & Derwing, T. M. (2006). The functional load principle in ESL pronunciation instruction: An exploratory study. *System*, *34*, 520-531.

Neri, A., Cucchiarini, C., Strik, H., & Boves, L. (2002). The pedagogy-technology interface in computer assisted pronunciation training. *Computer Assisted Language Learning*, 15, 441-467.

Pennington, M. C. (1999). Computer-aided pronunciation pedagogy: Promise, limitations, directions. *Computer Assisted Language Learning 12*, 427-440.

Reichheld, F. F. (2003). The one number you need to grow. *Harvard Business Review*, 81(12), 46-54.

Seidel, J. (1998). Qualitative data analysis. *The ethnograph manual*, 5, Appendix E. Retrieved from <a href="http://www.qualisresearch.com/">http://www.qualisresearch.com/</a>.

Willing, K. (1988). *Learning styles in adult migrant education*. Adelaide: National Curriculum Resource Centre.

Yates, L. (2001). *Teaching pronunciation in the AMEP: Current practice and professional development*. AMEP Research Centre. Sydney, Australia: Macquarie University Press.

- [1] We recognize that some teachers may need help identifying the particular pronunciation problems their students may have. Providing instruction in the diagnosis of pronunciation difficulties is beyond the scope of this project. Teachers who need help in this area are referred to <a href="http://teachingpronunciation.pbworks.com/f/Pronunciation+assessment+packet+.pdf">http://teachingpronunciation.pbworks.com/f/Pronunciation+assessment+packet+.pdf</a> and <a href="https://www.researchgate.net/publication/260119649">https://www.researchgate.net/publication/260119649</a> <a href="https://www.researchgate.net/publication/260119649">Assessing</a> <a href="pronunciation">Pronunciation</a> <a href="packet-">[back]</a>
- © Copyright rests with authors. Please cite *TESL-EJ* appropriately.