



BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA

FACULTAD DE LENGUAS

**OUTCOMES FROM THE USE OF DIGITAL DICTIONARIES:
A CASE STUDY OF BEGINNER LANGUAGE LEARNERS**

**A thesis submitted to the Faculty of Languages for the Degree of
LICENCIATURA EN LENGUAS MODERNAS**

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Abstract

This research is focused on the use of digital dictionaries for students that faced problems with English language pronunciation. I also realized that students improve pronunciation using speaking techniques and strategies, but sometimes these techniques and strategies do not help them satisfactorily. As a result, I based this research on a case of study following a qualitative approach method, because it was pretended to collect, analyze and present data properly.

Therefore, for collecting and analyzing information, some instruments were applied such as a researcher's journal, consulting guides, a digital dictionary program, semi-structured interviews and voice recordings. This study was composed through face to face sessions in which the participants expressed opinions about the interaction with instruments. All the responses were noted in a researcher's journal. After the collection of data, I analyzed it by categorizing the responses of students in charts. At the end of the study, I interpreted all of the charts in depth. And finally, I obtained some of the advantages and disadvantages of the use of the digital dictionary for improving pronunciation.

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TABLE OF CONTENT

	Page
CHAPTER I: INTRODUCTION	1
1.1 Rationale for topic selection.....	1
1.2 Significance of the topic.....	3
1.3 Theoretical context of the research	4
1.4 Research setting	4
1.5 Aims	5
1.6 Research Questions	5
CHAPTER II: LITERATURE REVIEW	7
2.1 The structure of the English sound system.....	7
2.1.1 Phonetics and phonology English pronunciation	7
2.1.2 Segmental features	8
2.1.3 Suprasegmental features.....	9
2.1.4 Rhythm, stress and intonation in English pronunciation	10
2.1.5 The phonetic alphabet	11
2.1.6 Description of English consonants.....	11
2.1.7 Description of English vowels.....	12
2.2 Articulatory Phonetics.....	13
2.2.1 Effective English pronunciation in context.....	14
2.2.2 The pronunciation of English in beginner Spanish learners.....	14
2.2.3 Difficulties of English pronunciation for Spanish speakers.....	15
2.2.4 The Importance of an appropriate pronunciation of English Language	16
2.3 Digital dictionaries	17
2.3.1 Using digital dictionaries to improve English pronunciation.....	17
2.3.2 Techniques and strategies to improve English pronunciation	18
2.3.3 Self-taught	19

2.3.4	Autonomy in language learning.....	20
2.3.5	Self-Correction in language learning	20
2.3.6	The use of paper dictionary to improve pronunciation	21
CHAPTER III: METHODOLOGY		22
3.1	Research design	22
3.2	Context of Research setting.....	23
3.3	Participants	24
3.4	Instruments	24
3.4.1	Researchers journal.....	25
3.4.2	Digital dictionary (Cd Software)	25
3.4.3	Semi-structured Interviews.....	26
3.4.4	Voice Recordings.....	26
3.4.5	Digital dictionary Guide.....	27
3.4.6	Phonetics and Phonology Guide	27
3.4.7	Piloting Stage.....	28
3.5	Data Collection Process	28
3.6	Data Analysis.....	30
CHAPTER IV: RESULTS.....		34
4.1	Advantages of Digital Dictionaries.....	34
4.1.1	Independent learning	34
4.1.2	Active Interaction.....	35
4.1.3	Specific tools for pronunciation.....	36
4.1.4	Program Availability.....	36
4.1.5	Vocabulary	37
4.1.6	Dictionary usefulness for pronunciation	38
4.1.7	Pronunciation of English	38
4.2	Disadvantages of digital dictionary	39
4.2.1	Technical problems	39
4.2.2	Complexity of some tools.....	40
4.2.3	Full English interface	40

4.2.4	Inaccessibility of dictionary	41
4.2.5	Complex English pronunciation	42
4.3	Pronunciation Improvements.....	42
4.3.1	Self-Correction	42
4.3.2	Self-Taught	43
4.3.3	Appropriate English Pronunciation.....	44
CHAPTER V: CONCLUSIONS		45
5.1	Implications	45
5.2	Limitations of the study.....	46
5.3	Directions for further Research	47
5.4	Conclusions	48
REFERENCES.....		49
APPENDIX I		52
	Digital Dictionary Users Guide	52
APPENDIX II.....		55
	Phonetics and Phonology Guide	55
APPENDIX III		57
	Supporting Questions for Semi-Structured Interviews.	57

Chapter I: Introduction

1.1 Rationale for topic selection

Studying English pronunciation as a second language implies a high level of difficulty, because of the development of the communicative skills (Richards, 1988). Bygate (1987) expressed that inside the communicative skills, speaking is a skill by which we are most frequently judged in society. Developing speaking skills comprises several aspects that influence this process, such as pronunciation, vocabulary, structure, and fluency among others. When I started the major in language English teaching (ELT) at BUAP University, I faced some complications in the practice of my speaking skill during my courses. For that reason, I did not participate and contribute adequately, I was afraid to talk because I didn't know the appropriate pronunciation of words. At the same time, I realized that classmates experienced the similar problem when it was the moment of speaking English, specifically in pronunciation. Consequently, I noticed that most of the students do not try to speak English because of the lack of practice during their early courses. When students start the major in English language teaching, they need to learn speaking techniques and strategies of production and articulation of English, but sometimes these techniques and strategies do not help them to improve sufficient. As a result of my previous experience, I would like to work with digital dictionaries for improving English pronunciation. And it will be discussed in the next section.

In this study, I will focus on beginner students of English that need help and support in the improvement of their pronunciation. There is a variety of resources that offer assistance for them in learning and practice. One of these tools based on technology, learning and language is a digital dictionary. A digital dictionary provides support in various aspects such as meaning,

structure and most important pronunciation of words. I think this tool is important because I used it, and it helped me out in my pronunciation practice. I found that a digital dictionary is more than a basic resource. Mainly, that is the purpose of this study I would like to analyze if the use of digital dictionaries could help students in the improvement of their English pronunciation.

On the other hand, I recognize that paper dictionaries are useful resources to know the meaning, structure and pronunciation of a word. However, it is hard to understand, talking about pronunciation, the different phonetic symbols and phonemes that are next to the word, especially for beginner students, who are inexperienced in the field of phonetics and phonology. Furthermore, phonetics and phonology is not taught in the first year of the major in ELT, but until the second year this subject is an option to take. In order to deal with pronunciation, rather than phonetic symbols, students could use a digital dictionary in a website, software or application for assistance as an alternative resource of their learning.

Although there are diverse advantages and disadvantages, digital dictionaries are useful, worthwhile and easy to access. Digital dictionaries could show different features like the meaning, structure, the precise phonetic symbols, samples of the use of that word, and finally in many cases the effective American and British English pronunciation.

During this study, I will take into account a qualitative research orientation method to analyze and corroborate the improvement of each participant. Students will interact with the dictionary by its own way. They will write some notes about the use of the dictionary and create a list of words that presented pronunciation problems for them. At the same time it is intended to create voice recordings weekly in order to examine the improvements of students. I will write a journal, it will include some notes about the use of the dictionary of each student. And I will

analyze the voice recordings and the journals. Finally after the study, I will explore the way in which students used the digital dictionary and more important if the digital dictionary helped or not.

1.2 Significance of the topic

The practice of the four skills in English is very important, but in this study I will focus on the skill that I consider the most demanding, speaking. Therefore, this study will be specifically based on the pronunciation of students that are learning English. Beginner students probably try to practice speaking but they could not pronounce English in an appropriate way because they do not have the appropriate resources. Consequently students need something else that can help them with the practice of this feature of English language. That is the importance of this study; I will apply digital dictionaries to improve pronunciation of English beginner students in the Faculty of languages at BUAP University.

Digital dictionaries could be advantageous to students that are practicing and need to reinforce their English pronunciation. If students want to increase their practice in speaking, digital dictionaries are handy to use them for self-correction. Digital dictionaries are practical and easy to access. They could provide self-confidence in students about their knowledge in English. Digital dictionaries are updated with recent information and I think that digital dictionaries are an important resource that could help students to improve and reinforce their English pronunciation.

1.3 Theoretical context of the research

There are different studies associated with the subject of my interest. All of them are parallel to pronunciation. In example, two of the most important subjects are phonetics and phonology. Phonology is the study of the sound systems of a language and phonetics that is concerned with describing speech (Ladefoged & Johnson, 2001). It is said that "Ordinary people who know nothing of phonetics have difficulties in understanding slow speech composed of perfect sounds" (Graham, 1916). Therefore digital dictionaries simplify the aspect of knowing phonetic symbols and provide at the same time self-correction. According with the subfield of pronunciation, it is said that "working in the sound system emphasizes the critical importance of the suprasegmental features and their use takes participants to create a communicative meaning" (Morley, 1999). Therefore phonetics and phonology are specific subjects of my study because are an important part of English language.

1.4 Research setting

The main location for this study will be the Faculty of Languages at BUAP University with students that recently started the major in English language teaching. It is thought that students who already started in the faculty of languages may have a basic knowledge and practice of speaking English. I think that speaking involves the hardest part in English language and the improvement of that skill should be at detail. For that reason I just will base my study on the pronunciation of students who already started their major in ELT. I consider that if a student wants to improve in an effective way their English speaking knowledge, it should be developed from the beginning.

Students that are in the beginning could improve easily more than the advanced level students, because the beginning is the moment to acquire all the information and make it clear. Although I will be focused on students that are in the beginning of their major in ELT, I would be interested to compare answers about the use of digital dictionaries with advanced level students.

1.5 Aims

In this study it is intended to use digital dictionaries like a resource to improve English pronunciation in beginner students. In the practice of pronunciation it is necessary a specific support and digital dictionary is the precise platform.

The purpose of this study is to examine whether digital dictionaries could be advantageous to improve pronunciation of English beginner students. Using digital dictionaries students could find the pronunciation of a word in both English languages, American English and British English.

1.6 Research Questions

I addressed two specific research questions for this study. Questions are based on the objectives and aims that I would like to achieve. And also they were selected thinking about instruments and participants. Although questions are related to the main instrument, participants will provide significant responses that will support this study. For that reason I want to know student responses and answer these precise research questions. The research questions are:

1. What are the main advantages and disadvantages of using a digital dictionary?
2. What extend could a digital dictionary improve pronunciation of English beginner students?

Chapter II: Literature Review

2.1 The structure of the English sound system

The English sound system is one of the most demanding languages to understand and try to learn as a second language. Hammond (2001), assumed that there is a quite difficulty to define the sounds of a language. He specified that English language postures a special challenge in the study, description and use of the sound system. Despite the fact that English is probably the most widely spoken language in the world, the pronunciation and accent varies widely with geographic, social, biological and among other aspects. In other words there is a huge problem because it exhibits a great deal of sounds variations. For that reason, to get involved with language, they should recognize the difference between languages and compare the aspects that influence in the learning of speaking skill. It is difficult to state the different sounds of a language without first considering the different structure sound variations.

2.1.1 Phonetics and phonology English pronunciation

The study of English sounds is represented in two important disciplines that are phonetics and phonology. Clark & Yallop (1998), said that the principal study of all of the facts of speech is usually termed phonetics. They were focused on phonetics and expressed that can be viewed as a group of phonetics sciences. In contrast, Niels and Meyer (1999), presented that phonological and phonetic studies are represented and used in speech comprehension and production. Niels and Meyer exemplified the processes, to see the importance and quite difference between both fields. They described that in one case a person hears and understands an acoustic input, whereas in the other case, the person produces an acoustic signal expressing a message to be conveyed.

In other case, Fletcher (1998) presented that speech is a determined human activity and it is not a simple movement of articulators to create energy or noise. She said that the term phonology is often associated with the study of the upper level of speech organization. Although in various studies it is said that phonetics composes phonology, Carr (1994) explained that phonology is the only study related to certain sorts of mental organizations. In particular, it is the study of certain types of mental category, mentally stored representations, and generalizations concerning those categories and representations. Roach (2009) said that phonetics and phonology have a long history, the main importance of both fields is how speech sounds are produced and also how speech sound is articulated, and both fields are related. Therefore, Learners of English should take into account the consideration that phonetics and phonology are important part in the improvement of English speaking skills.

2.1.2 Segmental features

When an utterance is analyzed, the most important element inside is the segment. That is, Roach (2009) that examined speech sounds in connected speech closely, he found many cases where it is difficult to identify separate sound units that correspond to phonemes and he related it with segments. He also added that because of previous knowledge we are able to write down something we hear in words separated by spaces, and we could transcribe with phonetic symbols, the sounds that we hear.

In contrast Fletcher (1992) explained that the aspects of accent and pronunciation are individual sounds, she categorized as phonemes or segments, meaning consonants and vowels. She considered that syllables and one-syllable words are considered as segmental aspects of accent and pronunciation, as well. Segmental aspects of accent and pronunciation are not heard

as being affected over more than one sound segment. Focused on the importance of a segment, it could be defined some characteristics of segments talking about speech. Gunnar (1996) considered some of the characteristics of segments of speech. He includes place and manner of articulation for vowels and consonants and voicing for consonants. He also added tongue height and advancement, lip rounding, and tenseness for vowels. In fact a segment is a minimal unit inside an utterance and it is as single as complex to explain but it is comprised during the speech.

2.1.3 Suprasegmental features

Improvements in suprasegmental aspects of English accent and pronunciation take an important part in the production of comprehensible speech patterns in English. Avery (2005) explained that suprasegmental aspects are key factors in accent reduction and speaking ability in general. He presented some of the elements around pronunciation. He divided in two different categories based on their characteristics and aspect segmental based on accuracy, suprasegmental based on fluency.

Conversely, Laver (1994) described suprasegmental aspect to how speech sounds function and how is affected at the sentence and discourse level, which is to say over multiple sound segments that combine to make phrases, clauses, and sentences. He included diverse suprasegmental aspects of accent and pronunciation like intonation, added stress, time-stress, tone, linking and connecting, thought groups, volume, speed, reduction, assimilation, deletion, weak forms of function words, conversational contractions, and standard contractions which are also used in writing. As a result, Suprasegmental features constrain basically the form and place of foreign language segmental variations. Both place and form of a variant will reflect its contextual position.

Several researches like have turned their attention to the role of rhythm, stress and intonation in speech. Pierrehumbert (1980) recognized the importance of those features in the improvement of English, like a necessary area for a foreign learner. In summary, suprasegmental features like intonation, stress and rhythm have a significant body of work that follows the elements of metrical phonology.

2.1.4 Rhythm, stress and intonation in English pronunciation

It is said that English language is a stress-timed language because it has important aspects to get a comprehensible speech. Many of those features change the way in which the speaker try to communicate with another. Hallyday (1970) clarified the concept accent as the potential salience of certain syllables within certain words. On the contrary, Gimson (1980) included a complete description of the accentual patters of English words within his more general treatment of English pronunciation.

Authors like Tragger and Smith (1951) particularly associate stress with loudness. They emphasize their studies on suprasegmental features because it explains in detail the function of and how affect discourse. Therefore to get a good recognition of the English language, learners need to take into consideration the principal suprasegmental features such as rhythm, stress and intonation, and among others.

2.1.5 The phonetic alphabet

In English, there is not a relation between the system of writing and the system of speaking (Avery and Ehrlich, 1994). The English alphabet has 26 letters but the number of speech sounds in English varies from dialect to dialect. Consequently, they suggested that in order to avoid the problems that the speaking system poses for the representation of sounds, it is helpful to use a phonetic alphabet when learning sounds in English language. Therefore, they added an alphabet to represent the basic sound of spoken languages linguists use a set of phonetic symbols called the International Phonetic Alphabet (IPA). In fact in the phonetic alphabet of the English language, each symbol represents only one sound and each sound is represented by only one symbol.

2.1.6 Description of English consonants

The production of consonants in English Language is almost the same that in other languages but there are many cases when a consonant has a change. Pennington (1997) clarified that the consonants are sounds made with closed or nearly closed articulations. She revealed that in English, both initial and final margins may include multiple consonants.

Conversely, Avery and Ehrlich (1994) classified English consonants from an articulatory point of view. According with their study, there are twenty four consonantal phonemes and can be divided based on the manner of articulation. Despite the fact that English consonants differ with the manner and place of articulation, it could be displayed some similarities between languages. For that reason, learners that are improving speaking skill could take the advantage of their native language because of the relationships with the production of consonants.

The following table summarizes the information about the articulatory features of the English consonants.

		Bilabial	Labiodental	Interdental	Alveolar	Alveopalatal	Velar
Stops	<i>vcls</i>	p			t		k
	<i>vd</i>	b			d		g
Fricatives	<i>vcls</i>		f	ð	s	ʃ	
	<i>vd</i>		v	θ	z	ʒ	
Affricates	<i>vcls</i>					tʃ	
	<i>vd</i>					dʒ	
Nassals		m			n		ŋ
Retroflex					r		
Lateral					l		
Semi- Vowels		w				y	w

Taken from Avery and Ehrlich (1994).

2.1.7 Description of English vowels

On the other hand, vowels are more complex when learning English speaking because they present a distinction in their production. For instance, in the description of English vowels Avery (1997) assumed that vowels, unlike consonants, exhibit a great deal of dialect variation. He also said that if you are not an American English, the distinction is displayed. However, Drezke (1992) presented in his study, that there are twenty vocalic phonemes and they can be categorized in terms of their type such as monophthongs and diphthongs. He included that

monophthongs are the front vowels, the central vowels and the back vowels. And diphthongs are sequences of vocalic elements which form a glide within one syllable.

The difference between consonants and vowels differs on articulation but the variation could depend on factor such as geographical region, social class, educational background, age and gender. The following chart precises the information about the features of the English vowels.

		Front (Unrounded)	Central (Unrounded)	Back (Rounded)
High	<i>tense</i>	iy (beat)		uw (boot)
	<i>lax</i>	ɪ (bit)		ʊ (book)
Mid	<i>tense</i>	ey (bait)	ə (machine)	ow (boat)
	<i>lax</i>	ɛ (bet)	ʌ (but)	ɔ (bought)
Low		æ (bat)	(pot)	

Taken from Avery & Ehrlich (1994).

2.2 Articulatory Phonetics

Sound is a movement. In order to understand the sounds of speech we must first understand how the different parts of the human body move to produce sounds. Keith (1998) differentiated the concepts of the fields of phonetics. We can find acoustic phonetics that is the study of the physical properties of speech sounds. Auditory phonetics concerned with how speech sounds are heard and perceived by listeners. And the field of articulatory phonetics is all

about the movements we make when we speak. All of the three different fields of phonetics are important in the training of phonetician and speech studies.

2.2.1 Effective English pronunciation in context.

The English pronunciation is the most active field that adapts language variations. Researchers have identified huge numbers of pronunciation changes happening in many countries. For instance, Dalton and Seidhofer (1994) thought that when people learn a native language, not only acquire the code, they acquire the learning of making decisions of how to use that language for an effective communication in context. Hymes (1974) assumed that a speech community of speaker is defined as a group of speakers who share a proper set of values for the production and evaluation of speech. In other words, English language pronunciation presents variations and learners should know and acquire those variants of the language system in order to establish an appropriate communication.

2.2.2 The pronunciation of English in beginner Spanish learners

The improving of English pronunciation in beginner students is fundamental because it is the moment to develop the language. Focused on the learning of Spanish speakers, learners who are out-going, confident, and willing to take the different risks probably have more opportunity to improve their pronunciation of the second language because they are more often involved in interaction with English language. Avery (1992) said that speakers of English are able to recognize Spanish accents. For that reason that is a sign that beginners learners of English language have to be conscious that the beginning is the most specific moment for develop the second language. The pronunciation errors that the second language produced in beginner learners are not just random challenges to produce unfamiliar sounds. As a result, there are a lot

of rules of combination, stress and intonation patterns that beginners can consider to improve the practice of their second language.

2.2.3 Difficulties of English pronunciation for Spanish speakers

Learners that are improving their pronunciation of English language find themselves with different problems in the way. One of the most important problems is the role of improving pronunciation of English against their native language, so it is an essential part that sometimes affects the practicing. Learners from different language backgrounds have difficulties with the different sound of English.

Elrich (1994) examined that sometimes teachers do not usually find themselves in a classroom populated with students who share a common native language. She also added that many pronunciation problems vary according to the native languages of the learners, it is also true that many problems of a more general nature can be found. This is simply because these sounds are not common in the languages in the world.

Spanish speakers find considerable pronunciation problems when they are learning English as second language. These kinds of problems are stated in a successive way when beginners try to improve the pronunciation of English. For example in the Spanish and Japanese language, the vowel system contains many of vowels and for that reason represents a big challenge for the learner of English. Ladefoged (1997) added that the major challenge in describing the articulation of vowels sounds is to define the position of the tongue. The tongue moves within a spatial continuum without making any significant construction in the different areas. Therefore, the pronunciation and the positioning between that vowels generates a many

problems for second language learners who are familiarized just make some distinctions for their production.

Another common problem that Spanish speakers presented, when they are learning English pronunciation, is about the production of consonants. Spanish speakers confuse the ways of production and the different manners of articulation of consonants. For that reason when they are engage in the practice, they do not produce what they want in an appropriate way. They just produce the consonant like in Spanish and this is a huge problem, because Spanish consonants sounds are different from English consonant sounds. Elrich (1998) exposed that stress, rhythm and intonation together follow a common problem in Spanish speakers. In Spanish language the stress of a word is regular, with just stress in almost the second and the final syllable. Spanish speakers use variation in stress position to differentiate words of different meanings. Spanish speakers do not have a short, reduced vowel equivalent to the English schwa. Thus Spanish speakers' pronunciation of English words and sentences may lack the vowel reduction necessary for the English rhythm.

2.2.4 The Importance of an appropriate pronunciation of English Language

The Spanish speaker that presents an appropriate pronunciation of English has a good communication among the other speakers. That is the main reason of all the aspects of English pronunciation, stressing, giving rhythm and intonation to their English language. Because they as new learners of English as second language could not produce English language in an appropriate way. Consequently, they could get confused and lost in the communication process. Thus, learners must be aware of specific aspects of pronunciation for being able to communicate

each other. In conclusion students should focus on specific aspects of the English sound system and the variation of the language which is crucial for an appropriate communication.

2.3 Digital dictionaries

In recent years, students that were learning English used the classic printed dictionaries to improve English pronunciation. They need to know something about the phonetically symbols, to could express the different sounds. Brinton (2002) said that a dictionary could help students with the pronunciation of a word and not just the meaning or spelling of an English word. The invention of technology brought different sources to help students with the learning of English language. In this case the technology came with an improvement of pronunciation with the use of a new invention (software) created and designed for foreign and native students. The new application, it is a kind of evolution of the classic dictionary, now it is called digital dictionary. Digital dictionaries help students to develop skills. These programs can either be downloaded or purchased on CD-ROM and installed.

Digital dictionaries include different functions. The one and the most common is a dictionary searching meaning, one of the most basic functions. Another function that digital dictionaries Includes is Text-to-Speech and Speech-to-Text (TTS), this function is useful to improve the pronunciation as it says produces an appropriate pronunciation of a word in English.

2.3.1 Using digital dictionaries to improve English pronunciation

With the spread of digital technologies, digital dictionaries have become a two-way mirror, a record not just of words' meanings but of what we want to know. Using the digital dictionary removes the responsibility of the student or the teacher not knowing the pronunciation

of a word; the inanimate third object knows the word. There are many digital dictionaries available online and with the invention of internet everybody can use it. The digital dictionary is an effective and interesting teaching and learning tool that captures students' interest and does much more than just translate, because students can find the phonological and the function of text to speech so students can hear the effective English pronunciation.

2.3.2 Techniques and strategies to improve English pronunciation

One of the ways in which pronunciation is practiced in the classroom is through the drilling. It involves teacher saying a word or structure, and getting the class to repeat it. Kelly (2000) said drilling intend to help students get better pronunciation and remember new items. It follows a process known as eliciting that is encouraging students to bring out a word, phrase or structure studied before. Teacher make use of prompts, images, movements and among others for helping students remind something previously seen; drilling is best done before student see the written form of the language, so teachers play the role of providing a model of the role in order to improve pronunciation, as a tool they can play the CD and motivated students to repeat what they listened as a whole group or in an individual way.

Another technique for improving English learning pronunciation is chaining, it refers to the action of produce a complete sentence or phrase because it included more words and therefore more sounds. One way to do it is by back chain, it means that certain parts of the sentence would be separated, so each part of the sentence is modeled by the teacher, and the students repeat. Listening activities is the most common strategy using by teacher to improve students 'pronunciation, this technique is found not just inside the classroom but outside in the daily conversation because it involves getting students to notice language and its use. Reading

activities, this is a receptive activity it means students do not produce language before received it. Pronunciation can be integrated when students read a text and they notice the pronunciation of a word or when teacher explain or give an example about how to do it.

2.3.3 Self-taught

One of the most important ways of learning that independent learners implement is self-taught. In other words, a self-taught person follows their own directions to achieve an objective. According to Dickinson (1985), that is because the learner is the principal responsible of the decisions and the applications around his learning. Therefore a self-taught person directs their learning by taking decisions and interdependence. On the other hand, Oxford (2003) point out, that a self-taught student is more than an assessor because is the one that evaluates his achievement through his objectives, and this evaluation supports him to design succeeding learning.

In a study, Holec (1985) described a self-taught person by using key words. He said that this kind of students could be defined such as setting own objectives, defining contents, selecting methods to use, progressing in subjects, self-monitoring the procedure, and evaluating learning. That is what Benson (1997) said, all the situation around the self-taught person is based on the needs and decisions involved to its learning. In conclusion, students that follow this way of learning take the complete determination of every single stage around his learning situation.

2.3.4 Autonomy in language learning

The main aspect in which students are independent of teachers is presented when they develop autonomy in learning. Dickinson (1987) referred this autonomy to the situation that students follow outside the classroom. In consequence, outside the classroom students apply independent activities and personal strategies. Conversely, Riley and Zoppis (1985) related this aspect to students working in a self-access center. Littlewood (1999) described autonomy such as the context in which students are completely independent of teachers, institutions or prepared material. Therefore, the term autonomy is related to general conditions and aspects of learning without a teacher, specifically in subjects such as learning second languages. That means the need of the learner to consider personal strategies, activities, material, and circumstances for own learning.

2.3.5 Self-Correction in language learning

One of the most important aspects that students develop when learning English autonomously is self-correction. Self-correction is an important aspect that influences the autonomy of students in the second language learning. According to Mishra (2005) the process of correction involves a variety of questions for the student, what to correct, mode to correct, when to correct and where to correct. Therefore, correction in language learning is focused on the learner perceptions and follows rational stages to success. In this case, Brumfit (1977) recognized the use of self-correction. He expressed that self-correction helps student to make more independent in terms of language learning. Thus, self-correction is interpreted as a success when a learner at the moment of committing an error is able to self-correct him.

2.3.6 The use of paper dictionary to improve pronunciation

Many British dictionaries, including the Oxford English Dictionary and the Cambridge Advanced Learner's Dictionary, use the International Phonetic Alphabet to represent the pronunciation of words. However, most American volumes use one of a variety of pronunciation respelling systems, intended to be more comfortable for readers of English. For example, the respelling systems in many American dictionaries use ⟨y⟩ for IPA [j] and ⟨sh⟩ for IPA [ʃ], reflecting common representations of those sounds in written English,[26] using only letters of the English Roman alphabet and variations of them.

Chapter III: Methodology

The following chapter describes the process of data collection of this study. The chapter comprises features that are based in a qualitative approach. At the same time, the selection of the instruments and analysis were focused to study beginner students that are facing problems in the practice of English pronunciation. For that reason, I will carry out this research taking into account the design and application of the methodology. I consider that the selected methodology for this study could provide answers of the research questions of this study.

3.1 Research design

According to Burns (2000), a research is a systematic investigation to find answers to a problem. In a study, a researcher should follow the best line to try to find answers. Therefore before an investigation, it is important to choose the way to carry out the study, such as qualitative and quantitative approaches for researching. Quantitative research consists of those studies in which the data can be analyzed in terms of numbers (Best and Khan, 1989). But according to Creswell (2009), the qualitative research is an income for exploring and understanding the meaning of individuals or groups of attributes to a social problem. This research will be a case of study following a qualitative approach because it is pretended to collect, present and analyze data properly. Yin (2003) explained that using case studies in research refers to follow a rigorous methodological path. He also described that the path should begin with the literature review through research question and objectives. Although case studies can be qualitative or quantitative, the case study of this research will convey a qualitative approach to capture all details of a particular group of students.

I will take into account some resources of data that will provide answers for this study. Hence, the instruments that will be used during this research were selected taking into account a qualitative approach such as a researcher's journal, consulting guides, a digital dictionary software and voice recordings. The purpose of each instrument is different but all of them are related. In this case, the researcher's journal will include different points of view of participants, audio recordings will be analyzed to see improvements of participants, guides are for consulting, and also the digital dictionary software will support students. I consider that the analysis of outcomes in each instrument will provide answers the research questions.

3.2 Context of Research setting

The research setting will be the Faculty of Languages at BUAP University with beginner students of English. These students are in their second year in the university so they are still contemplated basic level. The faculty of languages at BUAP University is the pretended place for this research because it has a respectable background for study. In this place I found myself in the same situation with the same problems when studying English. So, I consider in this research setting could be find students or participants that are studying languages and face some pronunciation problems.

The study of English as a second language has problems in pronunciation and the arrival to a new learning environment is challenging. The relation of this place with the topic of the study is that participants are learning and involved with the language. Hence, I think the faculty of languages is the best place to work with English beginner students for applying instruments, analyzing and getting answers.

3.3 Participants

The main participants that will be involved in the study are beginner students of English language. I consider that some students are facing pronunciation problems and I would like to support them using organized instruments. For this research, beginner students of English language are the main participants. I will select a small group of students, no more than 10 participants. That is because the study is based on qualitative research so it should prepare individual analysis to get a detailed data. Students are in progress of their second year in the Faculty of Languages and consequently are faced with some problems in their language learning, especially English pronunciation.

I will ask students to participate because it is a significant research in which they could identify pronunciation problems and with the use of instruments could improve them. I will ask some teachers to let me present myself and invite their students to my research. The subject of the class should be English target language II. So, I will prepare a brief introduction to the research about 5 minutes. Finally, I will contact each participant by sending a message by mail and present the purpose of this research.

3.4 Instruments

In this study were applied different instruments that provided answers for questions. All of the instruments are related to the same subject and objective. In the qualitative approach, instruments should be selected very carefully because of the specific and complete study and analysis. According to Delmont (1992), qualitative research is only suitable for people who care about it and are prepared for commitment. Therefore, the instruments that were applied in the presented study were Voice recordings, a Digital Dictionary (cd software), two Guides of study

(a guide about phonetics and phonology and a tutorial of the digital dictionary), and finally a Researchers journal.

3.4.1 Researchers journal

A researcher's journal was used as the main data-gathering instrument for this study. The researcher's journal was an important instrument because it includes the perceptions of participants from the application through the last use of the instruments. It had been written by my own in a document file. It has included notes such as comments, points of view, pronunciation problems and improvements of each participant. It was categorized by pages in which was included the name of the participant and dates of sessions. So in the different sessions, I took into account comments, points of view and improvements of each participant. In the same page I wrote personal opinions and comments weekly. Thus, the information and aspects provided by participants were expressed in the researcher's journal and followed a meticulous and particular analysis.

3.4.2 Digital dictionary (Cd Software)

The digital dictionary software was a consulting instrument for participants. As I explained, there are many kinds of a digital dictionary like the Longman, Cambridge, Macmillan and Oxford Digital dictionaries. The one that was selected for this study was the Oxford digital dictionary for advanced learners because the concept advanced was focused on the functions that the dictionary provided to students. Then the dictionary was provided in a disc for an installation process in the computers of participants. After the installation process, participants could consult any word and play the pronunciation of words. The digital dictionary also includes the meaning of a word, collocations, and samples. At the beginning of this study a digital dictionary disc was

provided for each student that contains the digital dictionary. During this study students should consult it by themselves. And finally after certain time students should improve their English pronunciation by using the digital dictionary.

3.4.3 Semi-structured Interviews

For this research, semi-structured interviews were selected as an instrument for collecting individual responses of participants. According to Flick (1998), the open-ended questions in an interview are carried in the form of an interview guide. In the same position, Gordon (1975) expressed that the wording and sequence of the questions in a semi-structured interview could be the same for each respondent. In another words, the main objective of this kind of interviews is to understand the individual points of views of participants. For that reason, the interviews for this research were in Spanish language and stated in four face to face sessions using a standard set of five supporting open-ended questions with each participant.

The main focus of questions was based on the use of the consulting instruments by participants. Every single response of participants was written down and expressed in the researcher's journal after each session. In my opinion semi-structured interviews were appropriated to explore the diverse perceptions and opinions of students. Details of the questions of the interviews are given in Appendix C.

3.4.4 Voice Recordings

In this research, voice recordings were important in the improvements of students in their English pronunciation. At the beginning of the research, students consulted some words in the digital dictionary instrument. They practiced English based on to the pronunciation that the

digital dictionary provided. After some sessions I asked students to record their own pronunciation of the words that they could practice and consult. It was a helpful tool because it offered an excellent technique to improve their speaking skills. Voice recordings were important instruments created by participants to recognize pronunciation problems. At the same time, voice recordings assisted students to provide self-correction and very interesting improvements pronunciation by themselves.

3.4.5 Digital dictionary Guide

The digital dictionary guide was a basic tutorial of the use of the digital dictionary software. In the first pages, it is presented the introduction of the digital dictionary and the main tools of it. It is explained some basic functions of the digital dictionary, such as meaning, pronunciation, collocations and samples. As I explained, it included 12 pages that included some instructions about the installation process and the use of some tools. It was designed by my own, taking some screenshots of the software. So, this guide was created with specific purposes like the consulting and use of the digital dictionary software.

3.4.6 Phonetics and Phonology Guide

The second guide was about general information of phonetics and phonology subjects. This guide provided a review of phonetics and phonology and most important presented the interpretation of phonetic symbols. It was composed by 8 pages that included some descriptions of vowels and consonants, manner and place of articulation. The phonetics and phonology guide should clear and support information that students know about the subject. Although the information of this guide is important, this guide is not for entire study. The information was gathered from specific resources like books based on the subjects, and it could include some

images and charts. It is supposed this guide could support the knowledge about the subject of students.

3.4.7 Piloting Stage

During the piloting stage, some instruments were provided such as the guides of study and the Digital dictionary software burned in a Cd. So I prepared instruments and three students were the participants in this piloting stage. The main reason for this step was because I wanted to know difficulties that they could face with instruments. In the use of the digital dictionary some students presented problems in the installation process. Therefore I have been prepared a different guide about the installation and the use of this resource. Some of the adjustments in the digital dictionary guide have been the insertion of some images showing step by step the installation process and the use of it. In the other hand, in the phonetics and phonology guide some important information was included. In conclusion, I realized that piloting stage in a research is very important to fix aspects before a complete introduction to study.

3.5 Data Collection Process

The data for this research was collected using a researcher's journal, voice recordings and semi-structured interviews. As stated before, during this study I classified the instruments for this research in consulting and collecting instruments. Although some instruments such as the digital dictionary program and the consulting guides were for consulting, they also contributed in the collection of information. This study was composed by four sessions in which the participants interacted with instruments. Consequently, the collection process was based on four sessions and in the following paragraphs will be described.

In the first session, consulting instruments were presented and applied individually. I provided instruments and gave an introduction to the study. The main instruments for participants were the digital dictionary program, the guide of phonetics and phonology subject and the second guide about the use of the digital dictionary. In the researcher's journal, the name of the participant and the date were written on the top of the page. In the next lines I wrote comments, opinions and responses that participants expressed based on the semi-structured interview after each session. The interview for this session was based on previous knowledge of the digital dictionary program and expectations of this study. As I expressed, all the information that participants provided in each session was written by my own in the researcher's journal at the end of the session.

In the second session, participants expressed their doubts, opinions and responses to the questions about the use of the digital dictionary and the information in the guides. The set of questions for this session was based on the interview about their first experience with the digital dictionary program and the consulting guides. At the end of this session I asked students to keep working with the digital dictionary and prepare a list of words that they were consulting on it. I wrote the answers students provide during the interview in the researchers journal.

At the beginning of the third session, participants mentioned some advantages and disadvantages that they found with the use of the digital dictionary. The interview for this session was focused to know opinions of the practice of pronunciation with the digital dictionary, problems with some tools and the information of the consulting guides. Also, in this session the list of words that was presented individually by participants. The presented words in the lists were the ones they consulted in the digital dictionary. Finally, at the end of the session I asked

students to record a voice recording file and send it to my mail. This recording was about the words that were consulted in the digital dictionary.

In the last face to face session, I wrote down the final opinions and responses of participants about the use of the digital dictionary in pronunciation. I included the last comments in individual pages for each participant in the researcher's journal. After some questions, I requested students to repeat the list of consulted words to see the improvements of their pronunciation. I also asked students to prepare a last voice recording about all the words that they consulted from the beginning to the end of this study. The last voice recording was sent it by mail. During the sessions of the entire study, I wrote down in the researcher's journal individual responses, problems, aspects and comments that students presented for a complete study.

3.6 Data Analysis

The following section presents the data analysis and how it was carried out in this study. The data analysis was based in the responses of participants. As expressed before, in this study a qualitative approach for research was taken into account; thus, it needed to analyze the results of the application of each instrument precisely. In the researcher's journal different responses were included such as points of view, comments and interpretations of participants. For that reason, the categories that resulted from the analysis were specific problems, advantages, disadvantages and personal opinions, as you can see in table 1.

Specific Problems	Advantages	Disadvantages	Personal Opinions
<ul style="list-style-type: none"> • The installation process of program • Difficult manage (Program) • Problematic for beginner people (Program) • Sometimes computer do not run the program • Cd rom drive needed • The speed of program • The use of certain tools • The basic information in the tutorial of the digital dictionary 	<ul style="list-style-type: none"> • Independent learning • Interaction with program • Variety of tools • Functionality • Interface of dictionary • Right pronunciation of English • American and British English Pronunciation. • Easy access program • Working without internet • Variety of Vocabulary 	<ul style="list-style-type: none"> • Installation process • Word by word pronunciation • The program works just in a computer • The complexity of some tools. • Full English language interface • A specific tutorial is needed. • The Complexity of words • The Font of the program 	<ul style="list-style-type: none"> • Useful and handy • Excellent for practicing pronunciation. • Simple and organized • Understandable • Clear information • Specific and interactive • Easy access • Good for practicing more English skills.

Table 1

The main reason of the chart was to classify and organize responses by each participant to analyze them by comparisons. In table 1, the specific problems were based on some difficulties that participants faced with the digital dictionary program and consulting guides. There were a variety of specific problems such as, the installation process of the program, the difficult manage, the digital dictionary was problematic for beginner people, sometimes computer do not run the program, for installation a cd rom drive was needed, the speed of program, the use of certain tools of program, and the basic information in the tutorial of the digital dictionary. In the same way

Likewise in table 1, some advantages and disadvantages that students found during the study are presented. Talking about the advantages section, some aspects could be found such as the independent learning, the interaction with program, the variety of tools, the functionality, the interface of dictionary, the appropriate pronunciation of English, American and British pronunciation, the easy access to the program, it works without internet and the variety of vocabulary. On the contrary, in the disadvantages category the presented aspects were the installation process, the word by word pronunciation, the use was based on a computer, the

complexity of some tools., the full English language interface, a specific tutorial is needed, the complexity of words and the font of the program.

And finally in the last section, some important opinions of participants are presented. These personal opinions describe that the digital dictionary was useful and handy, it was excellent for practicing pronunciation, the program is simple and organized, it was understandable, it had detailed information, it is specific and interactive, it is easy access and it was good for practicing some other English skills. Using the comparison table, I found differences and similarities among the answers of participants and I analyzed the responses very precisely. Another important aspect to analyze was the voice recordings provided by participants. The voice recordings were based on individual list of consulted words in the digital dictionary. For this step, I wrote down the consulted words from the recordings of participants and I created a chart that included every single list. Finally, I classified by participants A, B, C and D, as you can see in table 2.

Participant A		Participant B		Participant C		Participant D	
• Bike	• Whole	• Verge	• Park	• Broader,	• Employers	• Determined,	• Announced
• Owl	• While	• Debrief	• Garth	• Variety	• Which	• Obstacles	• Unit
• Vase	• Bother	• Wiping	• Screwed	• Build	• Third	• Though	• Discuss
• Thumb	• Hates	• Consciousness	• Cowardice	• Should	• Might	• Literature	• So
• Yacht	• Laugh	• Retrieving	• Able	• Platforms	• May	• Desirable	• Primary
• Learnt	• Amazing	• Decoy	• Shove	• Law	• Course	• Reliability	• Such
• Thought	• Sea	• Delivery	• Crown	• Students	• Accurate	• Keyboard	• Examines
• Somebody	• Kingdom.	• Tissue	• Feverish	• Participation	• Difficult	• Native	• Weight
• Airport		• Dumb	• Stroke	• Criteria	• Although	• Feline	
• Pillow		• Mite	• Hit	• Weighting		• Nature	
• Give		• Risked	• Tried	• Achievement		• Usage	
• Chair		• Inner	• Hustle	• Findings		• Communicative	
• Mobile		• Needle	• Weightless	• Kept		• Evaluate	
• Stares		• Willing	• Quite.	• Enough		• Pair	
• Twins		• Quirks		• Sheet		• Defined	
		• Spin					
		• Dime					
		• Spoon					
		• Enough					
		• Stick					

Table 2

In table 2, it is presented the classification of the list of consulted words provided by participants. The purpose of the classification was to analyze the consulted words throughout comparisons, from similarities to differences. And finally talking about speaking production and to see improvements of students, I compared the pronunciation in voice recordings provided by participants with the pronunciation of the digital dictionary. I play the voice recording of participants word by word and I play the pronunciation of every single word in the digital dictionary.

Chapter IV: Results

In the following chapter, the interpretation of the results that participants provided in this study is presented. According to Creswell (2008), analyzing and interpreting qualitative data demands understanding of how to make sense of the gathered information. As explained before, four different students were the main participants because their contribution in this research was regular, in depth and diverse. Consequently, in the following paragraphs the results will describe three main topics such as advantages, disadvantages and pronunciation improvements. Therefore to clarify this process, I included the participant's perceptions, named them such as, Participant "A", Participant "B", Participant "C" and Participant "D" to present individual responses.

4.1 Advantages of Digital Dictionaries

In the interpretation of the results of the study positive features were found. In addition, students expressed more positive than negative aspects. This section is related to the research question that wanted to know if there are advantages and disadvantages of the use of the program. Hence, the advantages found in this study were independent learning, active interaction, specific tools for pronunciation, program availability, vocabulary, functional for pronunciation and most important appropriate pronunciation of English. These aspects will be described at detail in the following paragraphs.

4.1.1 Independent learning

In this study, independent learning was one important feature that students developed and the digital dictionary program promoted. According to Forster (1972), independent learning increases the responsibility of the student in the achievement of individual objectives and goals.

In other words, independent learning is an important aspect that supports knowledge of students by personal initiative. As a result, through the consult of the digital dictionary program, students developed this feature because they consulted and worked in the digital dictionary program by determination of consulting and individual efforts.

Concerning independent learning, participant “A” used the program at the period he wanted and needed a pronunciation of a word in English language. Participant “B” learnt how to pronounce an English word without the support and help of somebody. In other case, participant “C” explored several sections with specific words by her own. Finally, participant “D” opened the digital dictionary program when he required the support of this resource.

4.1.2 Active Interaction

Another advantage in the exploration of the digital dictionary was the active interaction. In my opinion, I consider that active interaction promoted motivation for students to complete diverse activities. In the use of the program, students could explore diverse sections, interact, practice and learn. Participants expressed that this aspect changed their attitudes for working and consulting the digital dictionary.

About this active interaction aspect, participant “A” tried the different tools such as pronunciation tools, synonyms, antonyms, and word structure. Participant “B” explored the diverse sections in the digital dictionary. In the same position, participant “C” added that the interaction with the digital dictionary provided different functions of every single consult. And finally, participant “D” desired to explore the digital dictionary step by step.

4.1.3 Specific tools for pronunciation

Although the digital dictionary provided different tools to work with, the main function to explore in this research was pronunciation. The digital dictionary presented different tools for practicing pronunciation such as the voice recording tool, the phonetic symbols representation, the pronunciation of a word and the history of practiced words. For that reason, participants were supported by the guides to take advantage of those specific tools for pronunciation.

On the practice of pronunciation, participant “A” tried some pronunciation tools. He liked the part of the phonetic symbols showed in every consulted word. Participant “B” worked with specific tools such as the one that recorded own learners voices. In the case of participant “C” the section of phonetic symbols representation reinforced her production of English words. She also used the guide of phonetics and phonology. Finally, in a similar position “D” worked with the tool that pronounced the consulted words.

4.1.4 Program Availability

Another important aspect that was found in this research was program availability. The digital dictionary provided easy access and support to students at the moment they worked on it. Students found this aspect very efficient because they explored the program many times with no problems. They also used it in different computers at home, without the necessity of internet access. In another words, the digital dictionary was available, at any time for every function because it was installed in a complete size that worked with no the necessity of internet.

Based on what participants expressed. For participant “A”, worked in the digital dictionary adequately, every time he turned the computer on. In the same position, every time

“B” run the digital dictionary, it was accessible for searching. Participant “C” installed and used the program in every single laptop and computer at her home. As a final point, participant “D” found remarkable, the aspect that the digital dictionary functioned with pronunciation of words without internet.

4.1.5 Vocabulary

One important aspect in the digital dictionary was the extent vocabulary presented when consulting a word. Although it is known that the vocabulary is part of writing skill, students practiced pronunciation with the diverse words related to the one that they consulted. In another words, the digital dictionary presented variations of that word using with different endings, synonyms and antonyms. Participants expressed that they learnt more vocabulary and more pronunciation of words because they also practiced pronunciation with those words. In conclusion, students found different vocabulary related to the word that they first consulted and practice more pronunciation.

About the aspect of vocabulary related to pronunciation. Participant “A” practiced pronunciation with the variety of vocabulary that the digital dictionary provided. Participant “B” realized that the digital dictionary showed synonyms and antonyms of that word. He practiced pronunciation with those words. Participant “C” consulted specific words and the digital dictionary provided more words such as the conjugation of some words. Finally participant “D” started practicing with the full English interface showed in the digital dictionary.

4.1.6 Dictionary usefulness for pronunciation

The digital dictionary provided various utilities and the most important tools were for practicing pronunciation. As expressed before, the variety of specific tools for pronunciation were the phonetic symbols representation, the voice recorder, the pronunciation of a specific word, and the list of the consulted and practiced words. Every single tool had a specific function for practicing and improving pronunciation skills. Therefore, based on what participants expressed, I tried to know if those tools were functional for pronunciation.

Participants expressed similar opinions and comments about this aspect. For participant “A”, the digital dictionary was a good tool with different functions but he focused on pronunciation tools. He used the voice recorder and the pronunciation of words. Participant “B” just explored the tools for pronunciation. He used the phonetic symbols representation, the voice recorder and the pronunciation of words tools. In the same position, participant “C” used the phonetic symbol representation to support his pronunciation practice of a word. As a final point, for participant “D” just worked with the pronunciation of a words tool.

4.1.7 Pronunciation of English

Pronunciation was the main skill to improve in this research using diverse tools in the digital dictionary. As explained before, effective pronunciation of English is important to establish communication between people. As a result, participants realized certain aspects of pronunciation such as, word stress, rhythm and intonation of words to improve their English language. In addition, the digital dictionary also provided a contrast of English accents the American and British accent. Therefore, using the digital dictionary students identified the appropriated pronunciation of individual words in English language.

In the case of participant “A” practiced with the two English accents presented in the digital dictionary. Participant “B” also found two variations of English pronunciation. He played, recognized and practiced with the two English accents. For participant “C”, realized that when consulted a word, found American accents and British accents, also found varieties of American English accent. Finally, participant “D” just focused in the American English pronunciation when he checked a word.

4.2 Disadvantages of digital dictionary

In the use of the digital dictionary program some specific problems or disadvantages were found. The disadvantages were expressed individually for just a single or two participants. The following sections are related to the question to know the disadvantages of the use of the digital dictionary program. Therefore, some disadvantages of the digital dictionary will be presented such as technical problems, complexity of tools, full English interface, inaccessibility, and some complexity in English pronunciation.

4.2.1 Technical problems

As expressed before, the digital dictionary presented some problems related to the use and installation on computers. Mostly at the beginning, when participants installed the digital dictionary this problem was presented to students. Some of them could use the digital dictionary guide but some participants did not fix this process. Another aspect was the hardware of the computers because the digital dictionary worked slower for some participants. And finally, the requirements of a CD/DVD rom drive on computer to install it, because the digital dictionary program was provided in a CD. Although the participants presented technical problems, I supported them to fix the main tool and work efficiently.

Based on what participants expressed. Participant “A” worked in a netbook and this device did not include a CD drive. For that reason I supported him, transferred all the files from the CD to a pen drive and complete the installation process normally. Participant “B and C” installed the program easily with the support of the digital dictionary guide. And finally, for participant “D” the program run slowly because of the operative system of his computer.

4.2.2 Complexity of some tools

During their consult in the digital dictionary some participants faced another difficulty, the complexity of some tools. Some tools of the digital dictionary were a kind of problematic to use it. That was because participants did not know how these tools worked and how to do it properly. For that reason, when a student presented a problem with the function of a tool, I recommended checking the digital dictionary guide. And also provided support to students by mail.

As expressed before, just some of the students presented this difficulty. Participant “A” presented complications in some pronunciation tools. He solved using the digital dictionary guide. For “B” the tools were useful, he realized the efficacy of the digital dictionary guide. Participant “C” liked the one that record own voice, she also used the digital dictionary guide. Lastly, for participant “D” the digital dictionary presented a complexity because he could not identify the tools and use them.

4.2.3 Full English interface

The full English language interface in the digital dictionary was difficult for some students. The program was in English language interface and for that reason all the words, steps,

buttons, and instructions were in English. Consequently, for some participants, the full English language interface caused some problems. I consider that this aspect was excellent for students because they get involve with the language without translations. If they did not get clear the idea or the instruction, they could not accomplish or do the activity correctly.

In the case of participant “A” the full English interface in the digital dictionary created some problems because he was taking basic level of English. For “B” and “C” the full English interface was a challenge because they liked and learnt from it. And finally participant “D” felt lost in some important sections, instructions, functions and tools.

4.2.4 Inaccessibility of dictionary

After the right installation of the program, the access to this resource was easy, but in some cases the program was inaccessible. As I said, the program was designed to install it in a computer so if students did not have a computer, they could not install the program and work with it properly. So, students needed the access to their computers to run the digital dictionary program. Even though that the digital dictionary was installed on a computer, nowadays students spend much time in computers doing different activities.

For participant “A” the digital dictionary was available in the time he used his laptop. But he also expressed that he would like to have the program in his cellphone or another device. For participant “B”, it was interesting to use the program every time he needed it. He also added that installed the program in every single computer at home. Participant “C” worked in her computer everywhere. As a final point, participant “D” needed to stay at home and using his computer to use the program.

4.2.5 Complex English pronunciation

The main function to practice in the digital dictionary was the pronunciation of words but this function was tough for some students in the practice. Some participants expressed that it was difficult to recognize and repeat the pronunciation of large words. And for some of them the identification of the phonetic symbols it was also problematic. Therefore, the phonetics and phonology guide was provided to help students in the practice of pronunciation of words from the beginning of the study.

According with the opinions of participants some of them presented complexity in the English pronunciation. Participant “A” tried to practice and repeat many times to get the similar pronunciation. For participants “B and “C” the pronunciation in the digital dictionary was worthwhile and did not presented problems in the practice. And finally participant “D” used the guides but he just practiced with small words.

4.3 Pronunciation Improvements

In the present study, some aspects showed that pronunciation improvement was accomplished. For that reason in the following paragraphs, answers to the question are presented, what extend could a digital dictionary improve pronunciation of English students. As a result, the main aspects that showed improvements in pronunciation of participants are self-correction, self-taught and appropriate English pronunciation.

4.3.1 Self-Correction

One the most important aspects that the digital dictionary program supports was self-correction in pronunciation. I think that promoting this aspect provides a better understanding of

learning language by individual selves. In the case of the use of the digital dictionary, students realized that they were making mistakes in pronunciation. They played the pronunciation, repeated and also supported themselves with the use of the different tools such as the phonetic symbol representation or the individual voice recorder. Students expressed similar responses related to self-correction.

For example, participant “A” practiced pronunciation with repetitions but when it was a difficult word he used the support of the phonetic symbols representation and guides. Participant “B” tried both English accents and compared his pronunciation. “C” realized that the digital dictionary program promoted self-correction because she could practice in her English classes. Finally participant “D” contrasted the previous pronunciation that he knew it and the one that the digital dictionary program provided.

4.3.2 Self-Taught

Another important aspect that was found in the study was self-taught in the language learning of participants. The digital dictionary program was a great platform in which students took advantage to improve English skills. The different functions and tools for pronunciation worked adequately to the aims of participants. Hence, with the regular use of the digital dictionary program students perceived improvements in English pronunciation. They used the tools that they preferred and at the time they could because the program was accessible like an English teacher.

Regarding to self-taught, participant “A” liked the digital dictionary because it was an excellent source of information that support and help pronunciation practice. “B” explored, worked and learnt from the digital dictionary without the support of somebody. “C” learnt from

the different sections, she compared the digital dictionary with an encyclopedia because of the usefulness of it. And finally “D” liked the confidentiality of the program; he said that this aspect helped his style of learning.

4.3.3 Appropriate English Pronunciation

The last aspect that students showed in this study was the appropriate pronunciation of English language. The pronunciation of the individual voice recordings, based on the list of consulted words, was similar to the pronunciation of the digital dictionary program. Every time participants consulted a new word, they practiced their list and also played its previous recording. With the frequent use of the digital dictionary students could compare and practice pronunciation of words. The pronunciation of every single word that participant practiced involved rhythm, accent and intonation.

About appropriate English pronunciation aspect, participant “A” could pronounce the list of consulted words without the support of their recordings. He practiced with the program regularly. Participant “B” practiced pronunciation with the program and categorized their list of words to do not forget the pronunciation. “C” practiced with the digital dictionary recurrently. Her last recording was exactly the same that the pronunciation of the digital dictionary. Finally “D” presented a short improvement in his pronunciation because he realized that worked few times in the program.

Chapter V: Conclusions

The purpose of the study was to improve pronunciation for beginner students in BUAP using the digital dictionary program. As expressed before, the digital dictionary provided different tools in which students practiced and improved pronunciation skill. As a result, in this research a qualitative methodology was carried out. For that reason, some consulting and collecting instruments were taken into account to complement responses. Students practiced individually and improved some important aspects in pronunciation with the use of the digital dictionary program and the supporting guides. In summary, the main findings of the study based on the advantages and disadvantages of the program are presented in the following paragraphs.

5.1 Implications

The present study showed an alternative to use a digital dictionary program to practice English pronunciation. In other words, it provided support in English pronunciation for students and reinforced their self-confidence and fluency to apply it at school context. Students reinforced English pronunciation in specific focuses such as target language subject. For instance in target language subject, students expressed different vocabulary when they participated because they already knew an effective pronunciation of a variety of words. Consequently, teachers could provide this resource to reinforce the pronunciation practice of students. That is, because the digital dictionary program is an alternative platform of learning that provided specific tools for practicing and improving pronunciation skills.

In addition to the implications, this research showed that the digital dictionary increased the level of pronunciation of the students. That was, the digital dictionary provided the appropriate pronunciation of words by a variety of tools and students worked, consulted and

practice their pronunciation frequently. In my opinion, the use of the program in pronunciation was adequate to the necessities of every single student. Consequently, students improved accent, intonation, rhythm and stress of words using the variety tools in the digital dictionary.

Finally, another important aspect that is implied in this study is the application of this resource in English classes. In other words, the digital dictionary was portable to students like a paper dictionary but in this case it was portable in a computer. For instance, with this portability of the program students could share with classmates and work with it when target language, phonetics and phonology or another subject relate to language. Therefore, this resource could help and support to students but also support teachers at the moment of English subjects.

5.2 Limitations of the study

In this research, it was intended to use the digital dictionary to improve English pronunciation of participants. However, some limitations were present through the study in the methodology, analysis and interpretation of the results.

The first limitations were the voice recordings. These instruments were focused on the students practice and at the moments when students recorded the list of consulted words. So, voice recordings could be applied also at the moment of the semi-structured interviews in the face to face sessions. This fact could provide some extra details to express it in the researcher's journal. And finally, the number of the students that contributed in this study was focused on four participants. These students were selected because they participated in the study regularly. But above all, with more participants the study could be more divergent and diverse in responses.

Second, the selection of the digital dictionary program could limit the study because of the tools for practicing pronunciation. Furthermore, the single word pronunciation tool was a

limit in the pronunciation practice of students. In other words, the digital dictionary provided the pronunciation of single words and not the pronunciation of a full sentence. So, students consulted word by word in the program to complete the full English sentence pronunciation.

5.3 Directions for further Research

As stated before, this research proposed a different resource for practicing pronunciation of students. However, supplementary study of this resource is necessary. It is clear that this study improved pronunciation of beginner students of English, but some deeper research need to be done in order to know the progress of the pronunciation improvement of beginner students at detail. For instance, the use of different kinds of dictionary programs and the application of the digital dictionaries in student's classes are important aspects to follow in further researches.

Thereby, the use of different kind of digital dictionaries could reinforce better pronunciation ability. That is, because the digital dictionaries provided diverse tools for dissimilar focuses. For example, the selected digital dictionary provided a variety of tools for pronunciation but another program could provide more, less or not the same tools for practicing pronunciation. Therefore, the use of another kind of digital dictionary programs could let students to select or complement which of these programs could help them better to practicing pronunciation.

Simultaneously, using applications and programs in classes could support students learning. In other words, the use of the digital dictionary program could highlight the ability to practice and participated specifically at the moment of language classes. That is, because the teacher and the digital dictionary program are two different but complementary supporters of

knowledge. For that reason, a further research of the application of the digital dictionary program in language classes could express an important fact in students practicing and learning.

5.4 Conclusions

The results of the application and use of the digital dictionary software showed important aspects that assisted to improve pronunciation in beginner students. As previously stated, the responses of the four participants were classified and compared to get the final results. In the same way, the voice recordings provided by students were compared with the digital program pronunciation. And at the end of the interpretation, I divided the aspects into advantages, disadvantages and improvements of the use of the digital dictionary. These aspects are presented below.

In final conclusion, this study demonstrates that the frequent use of the digital dictionary program built an appropriate pronunciation for the communication of learners. In other words, the use of the digital dictionary promoted a different way of practicing and learning pronunciation. Students realized the importance of the pronunciation tools by practicing and imitating pronunciation. Consequently, students relied on the program and refined their skills to produce a more effective pronunciation of English language following the variety of tools. As a result, with the regular use of the program, students self-corrected themselves when they practice and identify specific aspects of pronunciation. At the end of the study, participants accepted the use of this innovative tool for practicing and improving their pronunciation skills. In fact, students became more assertive when they participated in class and produced language. The digital dictionary developed autonomy in pronunciation practice of students for use it in the real world and also for complementing the support of the teacher.

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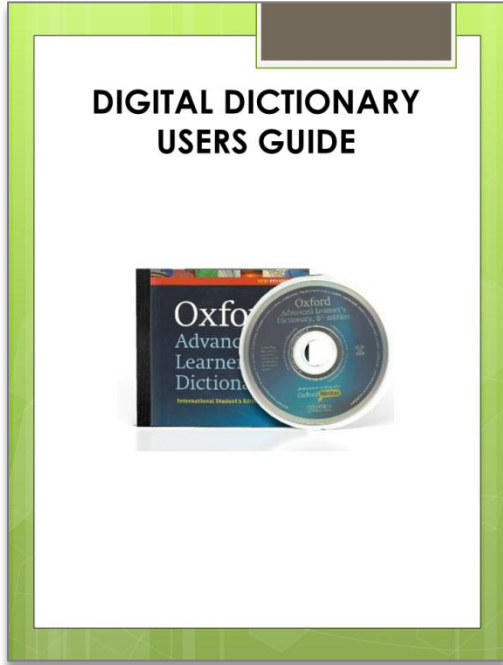
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APPENDIX I

Digital Dictionary Users Guide



Digital Dictionaries

- Digital dictionaries help students to develop, practice and improve skills such as pronunciation. This program provides different functions such as the meaning, samples in sentences of that word, phonetic symbols and the pronunciation of that word. So, it could be better to handle a digital dictionary than 1 kg of the paper dictionary.



2


Installing Digital Dictionary

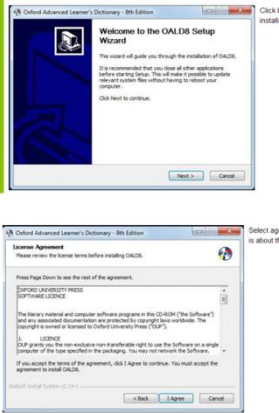
- 

Reprodución automática Select Set up
- 

Reprodución automática Select autorun.exe option

3

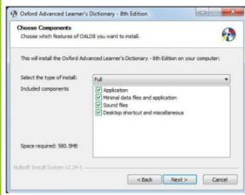
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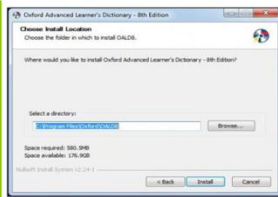
3 Welcome installation window
- 

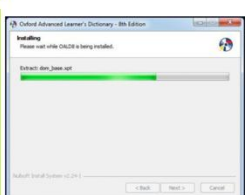
4 Click button Next to continue with the installation.

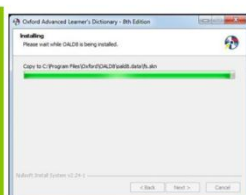
5 Select agree button. This agreement is about the license


4

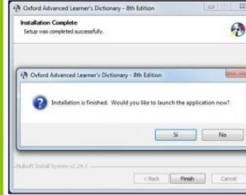
6  Select full installation. This option will give you the full installation package of tools.

7  The directory for installation: C:\archivosdeprogramas\oxford\OALDS. And click install.

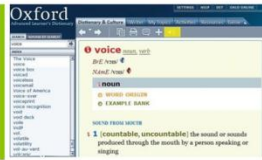
8  Installation process is loading. The green bar indicates that the program is installing.

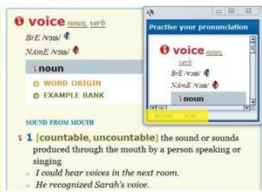
9  Completing installation process.

10  Completing wizard. When completing installation click finish.

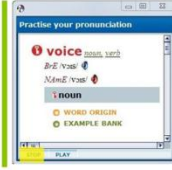
11  Running the application. Select yes, to run the program.

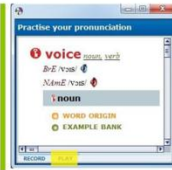
Practicing Pronunciation Tool

1  To practice pronunciation. First click on the pronunciation practice button.

2  A window will appear relate it to the consulted word. You will see two buttons on that window, record and play button.

1 **voice** ˈvɔɪs ˈvɔɪs
noun
 SOUND FROM MOUTH
 1 **[countable, uncountable]** the sound or sounds produced through the mouth by a person speaking or singing.
 - I could hear voices in the next room.
 - He recognized Sarah's voice.

3  You can practice pronunciation and when you feel ready click on record button.

4  after recorded your voice you can play it just clicking on the play button.

Listening Pronunciation Tool

1



The main homepage of the dictionary has a variety of tools.

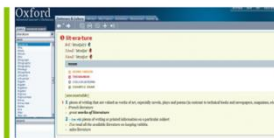
2



There are different sections in the digital dictionary homepage, but to the left you will find the **search bar**.

7

3



Type the word you want to consult and different words in the list will appear.

4

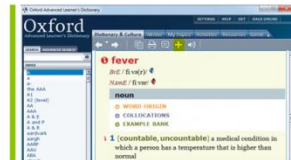


If you want to listen the pronunciation, **just click on the little speaker**. At the same time you can check the **phonetic symbols** of that word. You can play the pronunciation the times that you want.

8

Create a List of Consulted Words

1



On homepage, click on the plus button to create an entry of your consulted words.

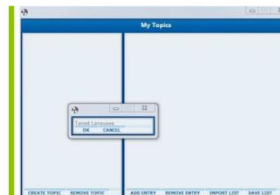
2



Click on create a topic to organize your consultings by subjects.

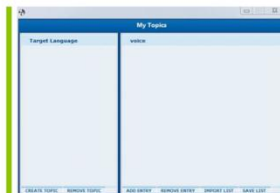
11

3



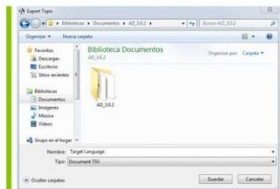
type the name of your category.

4



Click add entry to add your recent consult.

5



click on save list to save a list of your consulted words.

12

APPENDIX II

Phonetics and Phonology Guide

José Eduardo Pineda Pérez

Phonetics and Phonology Guide
fɔːnetiks and fɔːnɒlədʒi gaɪd

Places of Articulation of Sounds.

Speech sounds are made by air moving outward from the lungs through the mouth or nose. Different speech sounds result when the airstream is altered in some way by positioning of various parts of the mouth.

Figure 1. Places of Articulation.

Consonants (places of articulation)

<p>Bilabial Sounds. Phonetic symbols /p/ /b/ /m/</p> <p>Sounds in which the airflow is modified by forming a constriction between the lower lip and the upper lip are referred to as bilabial sounds. e.g. the first sound in: Pit, Beat, Meat</p>	<p style="text-align: center;">Figure 2. Bilabial Sounds.</p>
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<p>Labiodental Sounds /f/ /v/</p> <p>Sounds in which there is a constriction between the lower lip and the upper teeth are referred to as labiodental sounds.</p>	<p style="text-align: center;">Figure 3. Labiodental sounds.</p>
<p>Interdental / θ/ /ð/</p> <p>The tongue placed against or near the teeth. Such sounds in which there is a constriction between the tip of the tongue and the upper teeth are referred to as dental sounds.</p>	<p style="text-align: center;">Figure 4. Interdental sounds.</p>
<p>Alveolar /t/ /d/ /s/ /z/ /n/ /l/ /r/</p> <p>The tongue touches or is brought near the alveolar ridge in the production of certain sounds. Sounds in which there is a constriction between the blade or tip of the tongue and the alveolar ridge are called alveolar sounds. e.g. Tip, Dip, Sip, Zip, Nose, Lost, Rabbit</p>	<p style="text-align: center;">Figure 5. Alveolar sounds.</p>

<p>Alveopalatal /ʃ/ /ʒ/ /tʃ/ /dʒ/ ridge, the roof or the mouth rises sharply. This area is known as the alveopalatal area. Sounds in which there is a constriction between the blade of the tongue and the alveopalatal are called alveopalatal sounds.</p>	<p style="text-align: center;">Figure 6. Alveopalatal sounds.</p>
<p>Velar /k/ /g/ /ŋ/</p> <p>Sounds in which there is a constriction between the back of the tongue and the velum are called velar sounds. e.g. coat, goat</p>	<p style="text-align: center;">Figure 7. Velar sounds.</p>

Manner of Articulation

The manner of articulation of sounds represents how obstruction of the airstream is achieved.

Stops p/ b/ t/ d/ k/ g/

Consonants that involve a blockage of the airstream

Fricatives f/ v/ s/ z/ θ/ ð/ ʃ/ ʒ/

Not complete stoppage but rather a partial obstruction. The partial obstruction results from the lips or the tongue coming close to same part of the upper mouth. Close approximation of articulators causes turbulence or friction in the airflow.

Affricates tʃ/ dʒ/

Combination of the stop followed immediately by a fricative.

Nasals m/ n/ ŋ/

Made with air passing through the nose. Air is blocked in the mouth in the same way as it is for stop consonants. However, the soft palate is lowered allowing air to escape through the nose.

Liquids l/ r/

The air passes through the mouth in a somewhat fluid manner.

Semi vowels (Glides) w/ y/

Made with a relatively wide opening in the mouth.

Voicing and Voiceless

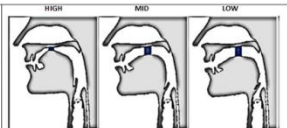
Sounds that are made with the vocal cords vibrating are voiced. Sounds made with no vibration of the vocal cords are voiceless.

Vowels

In the production of vowels there is relatively little obstruction of the airstream in comparison to consonants. Different vowel sounds result from different positions of the tongue and lips. So there are four characteristics.

Tongue Height – High, Mid, Low.

High vowels are because they are made with the tongue raised above its rest position.
Low vowels are because they are made with the tongue below its rest position.



Frontness/ backness of tongue

It depends if the vowel is produced with the front part or the back part of the tongue. Also there are vowels in English with neither the front or the back part of the tongue and are called central vowels.

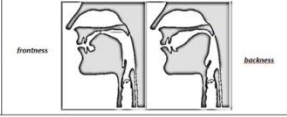



Figure 8. Vowel Characteristics

Tenseness/ Laxness

That is another way in which vowels can differ in terms of muscle tension in the mouth. Vowels produced with extra tension are tense and vowels produced without that tension are lax. e.g. Compare the tension in the words *beat* and *bit*.

Lip rounding

When vowels are produced we can feel the lips rounded that is called "lip rounding". e.g. the word "boat".




The Vowels of English

The next pictures show the phonetic symbols for each vowel sound. The symbols for vowels rarely correspond to English spelling because there are many vowel sounds in English than there are vowel letters.

		Front (Unrounded)	Central (Unrounded)	Back (Rounded)
High	Tense	/i:/ (beat)		/u:/ (boot)
	Lax	/ɪ/ (bit)		/ʊ/ (book)
Mid	Tense	/e:/ (bat)	/ə/ (machine)	/ɜ:/ (hour)
	Lax	/ɛ/ (bat)	/ɪ/ (bat)	/ɔ:/ (bought)
Low		/æ/ (bat)		/ɑ:/ (pot)

Figure 9. Vowel chart

THE VOWEL CHART
(Relation with the mouth)



	front	central	back
high	/i:/		/u:/
high-mid	/ɪ/		/ʊ/
high-mid	/e:/	/ə/	/ɜ:/
low-mid	/ɛ/	/ɪ/	
low-mid	/æ/		/ɑ:/
low			

Figure 10. Vowel representation.

Reference of figures

Figures	Pages
Figure 1 . Phonetics: The Sounds of American English. (n.d.) <i>Phonetics: The Sounds of American English</i> . Retrieved from http://www.uiowa.edu/~acadtech/phonetics/english/frameset-ad3.html	2
Figure 2 to 7 . Consonants articulation. Phonetics: The Sounds of American English. (n.d.) <i>Phonetics: The Sounds of American English</i> . Retrieved from http://www.uiowa.edu/~acadtech/phonetics/english/frameset-ad3.html	2-4
Figure 8 . Vowel characteristics. Phonetics: The Sounds of American English. (n.d.) <i>Phonetics: The Sounds of American English</i> . Retrieved from http://www.uiowa.edu/~acadtech/phonetics/english/frameset-ad3.html	6
Figure 9 . Vowel Chart. Avery, P. & Ehrlich S. (1994). <i>Teaching American English pronunciation</i> . Oxford University Press, New York.	7
Figure 10 . Vowel representation. Avery, P. & Ehrlich S. (1994). <i>Teaching American English pronunciation</i> . Oxford University Press, New York.	7

APPENDIX III

Supporting Questions for Semi-Structured Interviews.

Session I

Do you use computer resources for studying English?

What kind of programs do you use?

Do you know what a digital dictionary is?

What are your expectations at the end of this study?

Do you think are you facing pronunciation problems?

Session II

Did you face any problem in the first overview with instruments? What kind of problems? Specify the instrument.

How do you feel using the digital dictionary?

How frequently did you use it?

Did you use the consulting guides, for what purpose?

What do you think about the content of the consulting guides?

Session III

During this week, for what purpose did you use the digital dictionary?

How frequently did you use it now?

Did you have any problem with the D.D?

Did you practice pronunciation in the Digital dictionary?

Did you think, it is missing information in the consulting guides?

Session IV

Did you like working with the D.D?

Did the digital dictionary support your pronunciation practice?

What tools in the digital dictionary were missed or difficult to understand?

In your opinion, which aspects the D.D were efficient?

In which aspects the D.D was problematic?