



## EXPLAINING THE ENGLISH CONSONANT SOUNDS TO EFL LEARNERS: MORE ATTENTION ON VOICING DIMENSION<sup>i</sup>

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### Abstract:

To describe English Consonant Sounds (ECS), there are generally three major dimensions to be taken into account. These are Place of Articulation (POA), Manner of Articulation (MOA) and Voicing. The description of Voicing in the summary charts for English consonants raises the problem of its accurate position beside the POA and MOA. This brings about the issue related to which positions Voicing would occupy among the following: i) beside POA; ii) beside MOA; iii) Between POA and MOA (VPM). In order to solve this problem, the current paper aims to pinpoint some features that Voicing commonly shares with POA and MOA. To deal with, 64 tables of presentation of ECS have been selected from websites using the browser 'Google'. Through a descriptive analysis, the results show that 71% of the presentations do not figure out the voicing dimension in the tables, but they do that in another way; 25% of them show clearly the three dimensions of each ECS and 4% of them present the three dimensions separately. Based on these results, Voicing is, most of the time, granted less attention in teachers' explanations to EFL learners as if it were worthless. Therefore, it is suggested that the EFL teachers, while describing the ECS, should pay equal attention to voicing dimension during their teaching or in their presentation of ECS in a table.

**Keywords:** voicing, place of articulation, manner of articulation, ECS, description

### Résumé

Pour décrire les sons consonantiques anglais (ECS), on tient généralement compte de trois dimensions principales : Le point d'articulation (POA), le mode d'articulation (MOA) et le voisement. L'apparition de ce dernier dans les tableaux récapitulatifs des consonnes anglaises peut soulever la question de sa position exacte à côté du POA et du MOA. Ceci pose le problème relatif aux différentes positions que le Voisement pourrait occuper

<sup>i</sup> L'EXPLICATION DES SONS CONSONANTIQUES ANGLAIS AUX APPRENANTS DE L'ANGLAIS LANGUE ETRANGERE : PLUS D'ATTENTION AU VOISEMENT

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parmi les suivantes : i) à côté de POA ; ii) à côté de MOA ; iii) entre POA et MOA (VPM). Afin d'essayer de résoudre ce problème, le présent article tente de mettre en évidence certaines caractéristiques que le Voisement partage communément avec le POA et le MOA. Pour ce faire, 64 tableaux de présentation des sons des consonnes anglaises ont été sélectionnés sur des sites web utilisant le navigateur "Google". Une analyse descriptive montre que 71 % des présentations ne tiennent pas compte de la dimension du voisement dans les tableaux, mais qu'elles le font d'une autre manière ; 25 % d'entre elles montrent clairement les trois dimensions de chaque ECS et 4 % d'entre elles présentent les trois dimensions séparément. Sur la base de ces résultats, il apparaît que le voisement est, la plupart du temps, moins pris en compte dans les explications des enseignants aux apprenants de l'Anglais comme une Langue Etrangère, comme si elle était sans valeur. Par conséquent, il est suggéré que les enseignants d'anglais langue étrangère, tout en décrivant les sons des consonnes anglaises (ECS), accordent la même attention à la dimension du voisement pendant leur enseignement ou dans leur présentation de l'ECS dans un tableau.

**Mots clés :** sons consonantiques anglais, voisement, point d'articulation, le mode d'articulation, description

## 1. Introduction

The study of sounds in English reveals that English Consonant Sounds (ECS) seem to be more stable in their realization than the English Vowel Sounds (EVS). Robert Mannell (2010) points out some major differences between EVS and ECS basing on three major parameters such as physiological, acoustic and phonological. The first criterion (physiological) deals with the passage of the air between the active and passive articulators; that is the level of constriction. By considering the stops, the fricatives and the affricates, for example, the level of constriction of the ECS is, in general, greater than the EVS one. For the second criterion, it has been demonstrated in acoustic phonetics that consonants are less prominent than vowels, since vowels are more intense than the consonants that surround them. The last distinction in this series of three, the phonological one, concerns the structure of syllable as Mannell (2010) explains:

*Syllables usually consist of a vowel surrounded optionally by a number of consonants. A single vowel forms the prominent nucleus of each syllable. There is only one peak of prominence per syllable and this is nearly always a vowel. The consonants form the less prominent valleys between the vowel peaks. This tidy picture is disturbed by the existence of syllabic consonants. Syllabic consonants form the nucleus of a syllable that does not contain a vowel. In English, syllabic consonants occur when an approximant or a nasal stop follows a homorganic (same place of articulation) oral stop (or occasionally a fricative) in words such as "bottle" /bɒtl/ or "button" /bʌtn/. (p. 2).*

In the description of English sounds, we notice that ECS are meant to be more stable in realization than EVS. Consonants are those sounds which are produced by the interference of the airflow through the mouth (oral) and/or the nose (nasal). Consonants are created when that airflow is impeded so that the air cannot escape without creating friction that can be heard. In other words, according to Yehouenou (2006):

*A consonant sound is commonly defined as being a sound made when the pulmonic air meets some organs which stand in the way for a while. This means that at a given point, there is a formation of a stricture which corresponds to the kind of consonant sound to be produced. This requires the contribution of the active articulators ... and the passive articulators ... (p. 49).*

Particularly, what makes one consonant different from another one depends on where, in the vocal tract, the constriction is and how narrow it is. Furthermore, it depends on whether the vocal folds vibrate (voiced consonant) or do not vibrate (voiceless consonant) and whether air flows through the nose (nasal consonant) or through the mouth (oral consonant) in producing a consonant. In general, the description of ECS is carried out by considering three major dimensions which specify a unique ECS: the VPM label; Voicing (V), Place of articulation (POA), and Manner of articulation (MOA).

In the context of English as a Foreign Language, some teachers do not show, in the description of ECS, the equal attention and interest that should prevail while explaining the three dimensions to the learners. Consequently, these EFL learners would keep in mind two major dimensions namely POA, and MOA and, therefore, disregard the third dimension which is Voicing. So, this article aims at drawing the attention of both teachers and learners to the fact that the criterion of Voicing, as a distinctive feature in the description of the ECS, carries a series of physiological and phonological processes that are worthy to know. In order to achieve that purpose, the following research questions have been answered in the study:

- 1) How is voicing dimension addressed in most of the tables of ECS?
- 2) How is the flexibility of the position of Voicing shown?
- 3) Do English consonant charts suit the description of these sounds to the EFL learners?

There are many and diverse ways to deal with the description of ECS. However, this article focusses on the presentations of charts of these ECS by presenting them in table to summarize the criterion of each of them.

## 2. Literature Review

O'Connor (1980) shows the importance of Consonant sounds in English. According to him, ECS participate more in making English understood than vowels do and they "*form the bones, the skeleton of English words and give them their basic shape.*" (p. 24). This section aims to define the basic concepts which are generally taken into account while describing

the ECS. It also recalls some previous studies related to the current study and tackles a point in the description of ECS.

## 2.1 Basic Definitions

### 2.1.1 Voicing

The dimension of Voicing is referred to as whether the vocal folds vibrate or do not in the realization of a given speech sound. A sound is described as voiceless when the vocal folds do not vibrate during its articulation. On the opposite, if the vocal folds vibrate, the sound is called voiced. Ladefoged (2010) explains the process of voicing as follows:

*When you talk, air from the lungs goes up the windpipe (the trachea, to use the more technical term) and into the larynx, at which point it must pass between two small muscular folds called the vocal folds. If the vocal folds are apart (as yours probably are right now while you are breathing in and out), the air from the lungs will have a relatively free passage into the pharynx and the mouth. But if the vocal folds are adjusted so that there is only a narrow passage between them, the airstream from the lungs will set them vibrating.*  
(p. 20)

In the same vein, Ellen (2010), completing Ladefoged, says that “*Due to the Bernoulli effect (which says that an increased flow of air through a passage leads to a drop in air pressure) and the elasticity of the vocal folds, the vocal folds are sucked together again*” (p. 5). Knight (2012) goes further in illustrating the process by insisting on the fact that “*the speaker does not use muscles to open and close the folds for every cycle of the vibration. Instead, muscles are used to narrow them by just the right amount, so that aerodynamic constraints take over and they vibrate in the airstream from the lungs...*” (p. 38). So, the distinction between voiced sound as opposed to voiceless sound is mainly useful for the classification of consonant sounds. This is given more details in the section *Voicing and MOA*.

### 2.1.2 The Manner of Articulation: MOA

According to Skandera & Burleigh (2005:14), “*Another important feature for the description of speech sounds is the type or degree of closure of the speech organs involved. Thus, the manner of articulation refers mainly to the degree to which the air-stream is obstructed at the place of articulation of consonants.*” Shao Junzong, defines the manner of articulation by taking into consideration a number of factors which include the following:

- whether there is vibration of the vocal folds (voiced vs. voiceless);
- whether there is obstruction of the airstream at any point above the glottis (consonant vs. vowel);
- whether the airstream finds its way through the nasal cavity as opposed to the oral cavity (nasal vs. oral);
- whether the airstream takes through the middle of the oral cavity or alongside the oral tract (non-lateral vs. lateral).

These factors are the answer to the question, how a speech sound is produced. Yehouenou (2006: 51), in his definition of MOA, says: "... the active articulator impedes the flow of the airstream in one way or the other. This is what we call the manner of articulation which relates to the degree of stricture or constriction". The level of the stricture is the gap between the active articulator and the passive articulator at a point in the vocal tract. MOA can be plosive (complete closure in vocal tract) like the ECS [p], [t], [k], [b], [d], [g]. it can be fricative – (narrow constriction that causes interruption of air stream) like [f], [s], [h], [v], [z]. There are affricates made with a brief closure followed with a release of the airflow). Also, ECS can be described as nasal (velum is lowered and allows air to pass through the nasal cavity) such as [m], [n] [ŋ].

### 2.1.3 The Place of Articulation: POA

As it is named, POA is a point of vocal tract where the airstream is obstructed. In general, the POA is that point on the palate where the tongue is placed to disrupt the stream of air. The POA can be any of the following: the lips (the ECS is labial or bilabial), the teeth (dental), the lips and teeth (labio-dentals), the alveolar ridge (the alveolar articulations), the hard palate (palato-alveolar, palatal and palato-velar), the soft palate (or velum -- velar articulations), the glottis (glottal). Rogers (2013) summarises all this like "*The place of articulation is the description of where the obstruction occurs in the vocal tract. To describe the place of articulation of a consonant, we need to state which of the lower articulators articulates with which of the upper articulators.*" (p.19)

### 2.1.4 Related Previous Studies

Fuchs and Birkholz (2019) present both the basic articulatory and aerodynamic mechanisms of the production of ECSs and their main acoustic consequences. Their work is conducted around four phonological classification criteria among which there are voicing contrast, place of articulation, and manner of articulation. According to them,

*although the terminology "voicing contrast" implies that the distinction is made at the laryngeal level only, it is important to note that the production of voicing or voicelessness does not solely rely on laryngeal manoeuvres, but involve specific laryngeal-oral timings that condition aerodynamics in favor of voicing or voicelessness. In descriptions of the voicing contrast, it is advisable to distinguish between phonetics and phonology to avoid confusion, because the two terms "voiced" and "voiceless" are interchangeably used to refer to phonological representations or to phonetic realizations. (p. 5)*

Also, Bybee and Easterday (2019) do a crosslinguistic survey and articulatory proposal on consonant strengthening. The results of their work show that an increase in the degree of oral constriction differ from a decrease in degree of oral constriction in the places of articulation of the segment types affected and the range of conditioning environments involved. So, they suggest some possible avenues for explaining how glide strengthening may result from articulatory production pressures and speculate that

strengthening and weakening can be encompassed under a single theory of sound change resulting from the automatization of production. Also, Wang et al. (2013) show an articulatory distinctiveness of vowels and consonants based on a data-driven approach. They used 11 consonants from 10 healthy talkers and a support vector machine to come to the conclusion that *“the articulatory consonant space was consistent with feature-based classification of English consonants. (p. 169)*

Those research works focus on ECS rather than vowel sounds. Even, within the ECS, they put emphasis on particular features of these ECS. The current study follows the previous works in the sense that it focusses on the ECS as well and, it chooses a given feature of the ECS to draw readers' attention to. But, most importantly, it reduces the targets to the EFL learners or teachers for better improvement of the English language by this range of learners.

### 3. Materials and Methods

To describe the ECS for the EFL learners, there are diverse techniques and each teacher has their ways to do it. This paper recalls and advocates the equal attention that should be granted to the three dimensions. To go about that, it focusses on Voicing. It uses both quantitative E-research and documentary to describe the phenomenon being studied. The quantitative E-research consisted of consulting some websites to check the varieties of presentations of the charts resuming the description of the ECS. With this, 198 images that present tables or charts were consulted. In addition to those images, some eBooks and physical books were consulted, but the consulted charts online are the ones used to gather data. In other words, these steps were followed in the process of collection of the data:

- using the browser Google to search on the Internet the phrase *‘voicing compared to place and manner of articulation’*. This phrase contains the three keywords which appear in the description of ECS as far as the dimensions are concerned. They were purposely put together. In fact, initially, each word was used for the searching; but thousands of sites would pour answers out with a focus on that particular word, which does not necessary show the link among the three dimensions;
- selecting the option ‘Images’ in the Tool bar among other options available such as ‘all’, ‘videos’, ‘News’, and ‘More’. The rationale behind this is the only interest of this paper for the presentation of the ECS, which is usually shown in form of charts that summarize the three dimensions or their derived combinations. In ‘image’ there were pictures of tables, graphs and any other visual aids can be seen. There were 198 pictures that were scrutinized in order to gather data. The list of the consulted websites is available in the reference lists.
- Selecting the ‘descriptive’ tables among the previous tables. Descriptive tables, in this paper, mean tables which show the description of ECS in taking into

consideration either all the three dimensions or just one dimension out of the three. In other words, a descriptive table can show only POA; MOA; both POA and MOA; POA and Voicing; MOA and Voicing; Voicing, and Place and Manner of Articulation (VPM). There were 64 of such tables among the 198 pictures. The remaining pictures are composed of either vocal tracks or vowels charts, also graphs of any other interests.

#### 4. Data Analysis and Results

The 64 descriptive tables were classified into 4 categories: charts showing i) POA and MOA; ii) POA and Voicing; iii) MOA and Voicing and, iv) those where the three dimensions are occurring equally VPM and any other occurrences. They have been identified and summarized in table 1 below.

**Table 1:** Comparison of the three dimensions as in the descriptive tables

S/N	Category	Figure	Percentage (%)
1	POA and MOA	33	51.5625
2	POA and Voicing	1	1.5625
3	MOA and Voicing	1	1.5625
4	VPM	16	25.0000
5	POA only	5	7.8125
6	MOA only	7	10.9375
7	Voicing only	1	1.5625
Total		64	100.0000

There are two figures which enforce attention: the position of 'POA + MOA' and 'VPM'. It is observed from table 1 that 'POA + MOA' has the highest percentage (51.56%). It means that most of the presenters of the descriptive tables do emphasize, in describing the ECS, the dimension of place and manner of articulation. However, they give notices on the ECS which are voiced and those which are voiceless. This form of presentation is followed by 'VPM' (25%) where the three dimensions are simultaneously shown in the charts.

The 'POA+Voicing' and 'MOA+Voicing' are just sequences of a whole presentation. When going to the source website of that kind of charts, it is found out that there were other charts in addition to the one which is present among the descriptive tables. Similar analysis goes with the charts of POA only and MOA only. They are parts of a given text dealing with the description of ECS.

#### 5. Discussion

This section looks into the way these results are or are not related to the research-questions presented in the introductory section. The first research-question is to find out how Voicing is commonly addressed in the tables describing the ECS; that is, the

dominant presentations across the consulted websites. This question finds its answer in table 1 where the majority of the presentations focused on 'POA + MOA'. It means that in those tables, there are two entries: one for POA and the other one for the MOA. The third dimension which is Voicing would be known through a notice like the ECS on the left are voiceless whereas those on the right are voiced. This is the form in which the IPA presents the ECS for example. Even Yehouenou (2006) does teach the ECS in the same way.

It is by 'convention' according to Ladefoged (2010:42)'s explanation, "*by convention, the voiced-voiceless distinction is shown by putting the voiceless symbols to the left of the voiced symbols*". This is understandable in the way that there seems little to say about Voicing compared to the other two distinctive features. There are only two entries to consider as far as Voicing criteria is concerned: +/- voicing, whereas, there are about eight (8) places of articulation and up to five (5) for manners of articulation in the production of ECS. This talk is an easy way out to summarize the complex physiological and phonological processes that happen before the realization of what is known as Voicing.

The second research question seeks whether Voicing occupies a flexible position with the other dimensions. To answer this question, among the tables which show the presence of Voicing, the set of VPM is broken into subgroups. There are 04 possible presentations of this case. Either Voicing is put on the side of POA or it is put on the side of MOA. Some pictures put it equally along with the other two (Voicing+ POA+MOA) as well or, they emphasize the individual ECS. Table 2 shows a summary of these subgroups.

**Table 2: Position of Voicing**

S/N	Position	Figure	Percentage (%)
01	'Voicing'+ POA+MOA	08	50.00
02	'Voicing' with POA	01	6.25
03	'Voicing' with MOA	04	18.75
04	Individual ECS	03	25.00
Total		16	100.00

To have a clear idea about where Voicing would be, it is necessary to go into some details related to how it is made, the state of the glottis and to compare it with the meaning and principles of the other two dimensions.

### 5.1 Voicing and the State of the Glottis

In the simplification of the complex process of voicing, this paper puts stress on the glottis. The word glottis is used to refer to the opening between the vocal folds. If the vocal folds are apart, for normal breathing, the glottis is said to be open. This leads to production of voiceless consonant sounds like /p/, /f/, /s/ for example. When the vocal folds are not widely opened, air is passed through the glottis which is bit narrowed; this results in the production of a fricative sound for which the symbol is /h/. Air can push the vocal folds apart when they nearly touch each other, which causes them to vibrate



during the passage of air; the glottis is still narrowed but narrower than the previous state. The vibration of the vocal folds produces voiced consonant sounds. The last state of glottis is closed. This occurs when the vocal folds are tightly pressed together so that air cannot pass between them. This position is called a glottal stop or glottal plosive.

With this 'cause and effect' situation of vocal folds and the glottis, Omolara (2011:8) says that "whatever shape the vocal folds may assume at a particular time is the state of the glottis." In the same way, Yehouenou reduces this phenomenon of voicing to the state of the glottis: "We then have a system of 3TL (like in the description of vowels) which helps to identify an ECS and which is made up of the following: the state of the glottis- the place of articulation - the manner of articulation." Yehouenou (2006: 52)

### 5.2 Voicing and MOA

In most cases, the reason for the term 'manner' is obviously legitimate. MOA, as it is defined above, deals with the various labels for manner of articulation which describe how air flow is modified in the mouth, the manner in which the organs in the mouth retain or release air to produce speech sounds. Similarly, 'Voicing' is realized through the manner that the vocal cords, and therefore the glottis, behave. Voicing is nothing but the result of how the glottis reacts to the air stream from the lungs. Some authors by defining the MOA take into consideration a number of parameters or facts that are related to 'Voicing'. So, they align Voicing alongside MOA. This is illustrated in the following chart.

Figure 1: Voicing and manner of articulation

Classification of NAE Consonant Phonemes							
Manner of Articulation	Place of Articulation						
	Bilabial	Labiodental	Dental	Alveolar	Palatal	Velar	Glottal
Stop				t		k	
Voiceless	p						
Voiced	b			d		g	
Fricative		f	θ	s	ʃ		h
Voiceless							
Voiced		v	ð	z	ʒ		
Affricate					tʃ		
Voiceless							
Voiced					dʒ		
Nasal				n		ŋ	
Voiced	m						
Liquid				l	r		
Voiced							
Glide					y		
Voiced	w						

(As seen at <http://www.writeopinions.com/manner-of-articulation>)

### 5.3 Voicing and POA

As it has been said above, POA concerns the 'specific' point in the vocal track which is involved in the articulation of a given ECS. Similarly, Voicing also happens in a well-known location. By simplifying the complex process of Voicing (to the observed result which is vibration), there is no other organs than the vocal folds whereby the phenomenon of vibration of the vocal folds can occur; and these vocal folds are located somewhere which has already been discussed. Hence, considering it, in this paper, like a POA finds its place in the rationale behind its description, even the convention that Ladefoged explains did implicitly take into account such consideration. Moreover, in the

descriptive tables of presentations consulted on websites, one author has the same opinion by making it clearer as it is showing on this chart:

**Figure 2: Voicing and place of articulation**

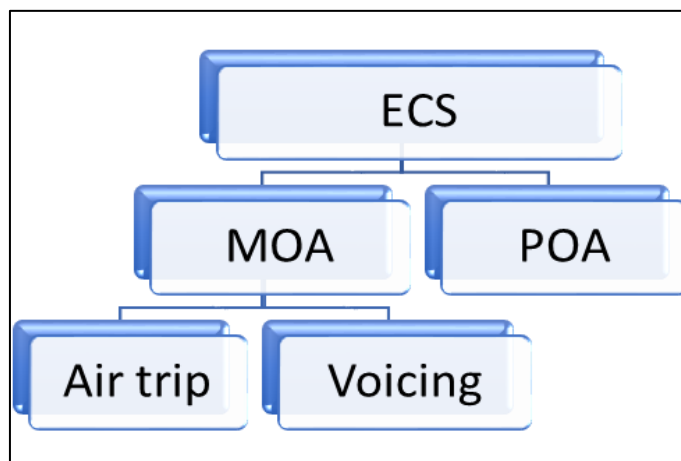
Manner of Production	Place of Articulation							
	Labio-Bilabial VS V	Lingua-Dental VS V	Lingua-Dental VS V	Lingua-Alveolar VS V	Palatal VS V	Velar VS V	Glottal VS V	
Plosive	p b			t d		k g		
Fricative		f v	th- th+	s z	sh zh		h	
Affricate					ch j			
Nasal		m		n		ŋ		
Glide	hw w			l*	r**		y	

(As seen at <http://www.auburn.edu/~fitchjl/Data/Chapter5text.html>)

### 5.4 Flexibility of Voicing

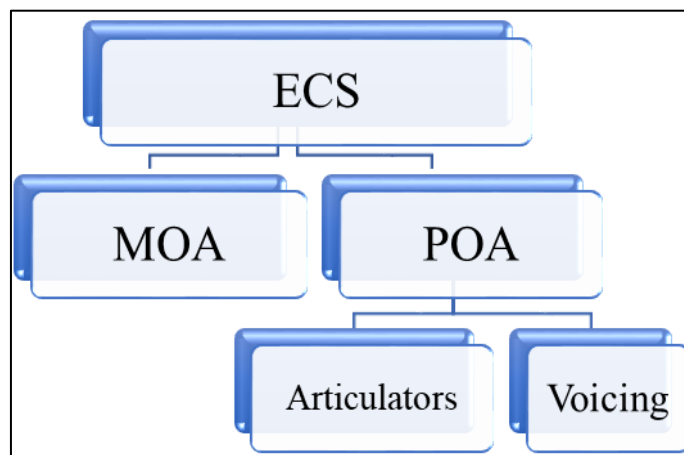
Particularly, in this paper, it has been shown that Voicing shares characteristics which fall into the domain of the definition of either POA or MOA. So, it could be put alongside POA as well as MOA. This is referred to, in this article, as flexibility of Voicing as opposed to rigidity of POA and MOA. Consequently, it is advisable that teachers take that notion of flexibility of Voicing into account as well. Since the dimension Voicing can be placed on either side (POA and MOA); this means that Voicing needs more emphasis like the other two dimensions. For those who do present two-entry tables, it can be said that there are two major dimensions; one of these two is made of two other parameters.

To the question related to which dimension would be subdivided into two, the results of table 3 above provide a path. In fact, many presenters have put Voicing along with the MOA. In this case, it would be like, there are two major dimensions: POA and MOA, the latter being divided into *i) the 'air trip' and ii) 'Voicing'*. The 'air trip' is how air passes freely or is modified during its trip through the vocal track. It deals with being Stop/plosive; nasal; fricative so on and so forth. It looks like this chart:



**Figure 3: Voicing seen as a MOA**

Also, when a teacher decides to put Voicing along with the POA, the explanation would be like the following: POA being divided into *i) the 'articulators'* and *ii) 'Voicing'*. The articulators represent the inventory of all the speech organs that intervene in the production of a particular ECS in the vocal track. This is illustrated like the chart below:



**Figure 4:** Voicing seen as a POA

The last research question is to know the kinds of presentation that suit the description of the ECS to the EFL learners. First, when the presentations show only POA + MOA, it means that, it is these two dimensions which are the most important and it seems Voicing would be optional; since there are three dimensions but, two of them are represented and one is left down. The latter is not then a determinant that someone cannot do without. Some of these scholars mention, somewhere in their presentation, the occurrence of Voicing and specify the state of the glottis in producing an ECS. What is raised in this article is the lack of providing equally a visible and clear place for Voicing as a complete dimension in those tables.

In EFL context, learners are not very familiar with the use of English phonetic sounds, even at higher level like universities. For the EFL learners, the teaching of English sounds should go through easy and clear ways and techniques of teaching. Other presentations do not even show any written notice on Voicing. Their readers should be specialists or must have read or known the ECS somewhere else since there is no notification as far as Voicing is concerned. The previous section (flexibility of Voicing) has partially answered the question in terms of categorizing the dimensions. But it does not solve the issue of having a simple and easy way to present the ECS. So, another way to present the ECS is to show each ECS with the description of the three dimensions.

In the light of this paper, it is clearly understood that the presentation of the three dimensions with the same attention is the one highly suggested. This has an immediate effect of impacting the EFL learners, yet further studies must be carried on this matter like conducting an experimental study whereby the control group would be taught the conventional presentation and the experimental group would be taught this suggested presentation. There are generally twenty-four (24) ECS. So, each ECS is described by showing the three dimensions. Here is an example:

**Table 3:** Showing equally the three dimensions

S/N°	ECS	Voicing	Place of Articulation	Manner of Articulation	S/N°	ECS	Voicing	Place of Articulation	Manner of Articulation
01	[p]	voiceless	Bilabial	plosive	13	[v]	voiced	labiodental	Fricative
02	[b]	Voiced	Bilabial	plosive	14	[θ]	voiceless	dental	Fricative
03	[t]	voiceless	Alveolar	plosive	15	[ð]	voiced	dental	Fricative
04	[d]	Voiced	Alveolar	plosive	16	[s]	voiceless	alveolar	Fricative
05	[k]	voiceless	Velar	plosive	17	[z]	voiced	alveolar	Fricative
06	[g]	Voiced	Velar	plosive	18	[ʃ]	voiceless	postalveolar	Fricative
07	[tʃ]	voiceless	Postalveolar	affricate	19	[ʒ]	voiced	postalveolar	Fricative
08	[dʒ]	Voiced	Postalveolar	affricate	20	[ɹ]	voiced	retroflex	approximant
09	[m]	Voiced	Bilabial	nasal	21	[j]	voiced	palatal	approximant
10	[n]	Voiced	Alveolar	nasal	22	[w]	voiced	labial + velar	approximant
11	[ŋ]	Voiced	Velar	nasal	23	[l]	voiced	alveolar	lateral approximant
12	[f]	voiceless	Labiodental	fricative	24	[h]	voiceless	glottal	Fricative

## 6. Conclusion

The ultimate goal of this paper is to draw teachers' attention in charge of phonetic course in an EFL context on the actual position of voicing which is one of three major dimensions while describing the ECS. It reviews the ECS and their effective production to guide the learners to produce effective speech patterns.

The collected data from different websites show that the high rate of occurrence of Place of Articulation (POA) + the Manner of Articulation (MOA) can make EFL learners feel like Voicing is not that determinant in the description of the ECS. From the analysis of the data and based on some principles of Voicing, one can say that Voicing has a flexible position compared to the POA and MOA. But the results show that it is closer to MOA than to POA.

All the same, this article advocates the presentation of the three-entry table; this presents the three dimensions with equal occurrence and therefore, the same attention. The open question is then, which one of the presentations of ECS is the easiest to teach EFL learners? The answer is left to the teacher who wants to make the learning of ECS very easy and less confusing for the EFL learners.

### Conflict of Interest Statement

The authors declare no conflicts of interests.

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