

# Noises and Colors: Two Untraditional Methods of Teaching ESL/ EFL Pronunciation

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**Abstract**—This article is based on a professional development session or presentation that the author gave in a regional TESOL affiliate conference, and it discusses the importance of teaching, why ESL/ EFL teachers should teach pronunciation, the reasons they generally give for avoiding it and how we can integrate it into our curriculum. The author sheds light on SLA, Second Language Acquisition, research especially studies that are related to connectionism or the noticeability hypothesis and their connection to teaching and practicing pronunciation in the ESL/EFL classroom. The article focuses on not only teaching segmental aspects of English pronunciation such as vowel phonemes but underscores suprasegmental features such as thought groups/chunking and word/phrase stress because they shape rhythm in English, which is key to intelligibility. The author also suggests using two effective and tested techniques in teaching pronunciation to a variety of ESL/EFL learners and provides samples of classroom activities that could be easily implemented in teaching pronunciation together with vocabulary. The article concludes with reviewing some studies conducted quite recently about one of these two suggested approaches to see how effective this approach is.

**Index Terms**—articulatory phonetics, word/phrase stress, thought group, rhythm, tonic syllable, Color Vowel Chart

## I. INTRODUCTION

Pronunciation matters. What a short sentence to start with although a lot of linguistic curricula and materials contain few and sometimes no activities targeting pronunciation. Language is basically a medium of communication, and effective communication requires clarity. Listener-friendly and intelligible pronunciation is key to clarity, fluency, and better communication. ELT professionals need to realize the importance of teaching pronunciation whether explicitly or implicitly. There are several sound reasons why it is sound to teach English sounds; the first section of this article discusses some of these reasons before giving details about the two suggested approaches to teaching pronunciation to learners with certain preferable learning styles and to special groups of learners. The article is based on a presentation given by Gabriel (2021) about relevant pronunciation teaching tips.

## II. HOW SOUND IS IT TO TEACH ENGLISH SOUNDS?

Teaching pronunciation counts. Another short statement that research studies support to a good extent especially when it comes to introducing, practicing, and substantiating suprasegmental features of pronunciation. O'Brien (2004) confirms through a longitudinal study the efficacy of teaching vowel-controlled suprasegmental pronunciation features such as intonation, rhythm, chunking, stress and connected speech. Another study conducted by Kissling (2013) underscores the pedagogical gains obtained through explicit teaching of pronunciation features of foreign languages. Explicit teaching of pronunciation might evoke objections as it could entail using metalanguage and linguistic jargon that could put off non-native learners of the language; therefore, some ELT practitioners might argue that teaching pronunciation is an optimal practice with advanced/proficient EFL/ESL learners. As a counterargument here, explicit teaching of pronunciation does not necessarily involve using terminology or lexicon that is esoteric to phonologists and linguists. The choice of instructional strategies is based basically on teachers' and students' beliefs and preferences, and some studies showed that students prefer grammar-based teaching methods (Brown, 2009). Since learner-centered approaches are effective and learners themselves prefer learning explicitly, it is beneficial to introduce and practice pronunciation features. As for delaying teaching pronunciation, proponents of the critical period hypothesis promulgate it is more efficient to introduce it earlier as proved by studies including massive sampling amounting to millions (Hakuta et al., 2003). Therefore, target-like, fluent, and comprehensible pronunciation skills are difficult to acquire and master by late second-language learners.

### A. Learning/ Teaching Pronunciation and Communicative Competence

The first strong and plausible reason for teaching pronunciation is boosting communicative competence among target language learners and avoiding breakdown of communication that could emanate from mispronunciations. Inaccuracies in pronunciation are sometimes due to the negative transfer impact of the mother tongue (Allard et al., 2011) especially when the first language does not have certain phonemes or phonological features that are typical of the target second language. For instance, Arabic includes only one voiced realization of bilabial plosives/stops, which is /b/; as a result,

occurrences of voiceless /p/ are frequently mispronounced (Al-Ani, 1970). Sometimes the context clarifies what is meant or intended and communication might not be severely impacted, but this is not always the case.

There are many instances when this specific error could result in weirdly hilarious misunderstanding (Barros, 2003). Below are examples of what could happen as a result mispronouncing /p/:

- He swallowed the **bills** (*instead of "pills"*).
- His uncle runs a **big** farm (*instead of "His uncle runs a pig farm"*).
- It was his foolish **bride** that made him lose the **cup** (*instead of "It was his foolish pride that made him lose the cup"*).

Arabic learners of English sometimes replace /θ/ and /ð/ with /s/ and /z/ respectively, which could cause some trouble in pronouncing words such as "think, thin, breathe and clothing". Speakers of Romance languages such as Italian and French sometimes have trouble pronouncing long vowels and tend to shorten them (Flege & MacKay, 2004). Here is an example of replacing "fate" with "feet" because of confusing long vowels: "The queen had no desire to share the **feet** of her dead husband". These examples reflect how communication could be influenced; therefore, teaching pronunciation is important to develop communicative competence.

### B. Ortho-Phonological Unpredictability

The second pressing reason for teaching pronunciation is the nature of English orthography/spelling and its notoriously unpredictable irregularity or inconsistency with its spoken counterpart: pronunciation (Schane, 1970). Unlike several languages, there is no one-to-one correspondence between the English alphabet and different sounds or phonemes (Kenworthy, 1987). No matter what rules ELT professionals may establish, there are always numerous exceptions to these rules. The only rule is that inconsistency rules. This inconsistency or ortho-phonological unpredictability is manifested in many ways as shown below:

#### (a). One sound but variable orthographies

- The long vowel /ɪ:/ as in: He, believe, Caesar, sees, seize, seas, people, amoeba, key, machine, scene, ...etc.
- The short vowel /e/ as in: Dress, friend, bread, any, many, said, ...etc.

#### (b). One orthography but different pronunciations

- **All**, **apple**, **father**, **want**, **gray**, **black**, **mustard**, **bad**, **any**, **about**, **age**, ...etc.
- **Work**, **women**, **woman**, **of**, **so**, **to**, ...etc.

#### (c). One sound but two letters

- **Shoot**, **choke**, **phone**, **plain**, **lock**, **book**, **boast**, **apple**, **special**, ...etc.

#### (d). One letter but two sounds

- Schizophrenia, Exit, **box**, ...etc.

#### (e). Letters standing for no sounds

- **Corps**, **mnemonic**, **know**, **doubt**, **indict**, **isle**, **bough**, **pterodactyl**, **psychology**, ... etc.

This weird and irregular link between English spelling and pronunciation inspired language-loving poets to write poems that vividly point out difficulties ESL/EFL learners could experience when they learn pronunciation based on written texts. "The Chaos" is a seminal example that epitomizes samples of the challenges faced by nonnative learners of English (Upward, 1994). Another shorter poem, taken from a letter by Bland and published in the London Sunday in 1965 and cited by several well-known linguists such as Chomsky, shows the intricacies of English spelling patterns and their unpredictable pronunciations (Shiple, 2013). Below are the first four lines of this untitled poem:

*"I take it you already know  
Of tough and bough and cough and dough?  
Others may stumble but not you  
On hiccough, thorough, slough and through"* (Shiple, 2013).

The writer of this article himself was inspired by the same phenomenon after reading the intriguing short story "The Story of an Hour" (Chopin, 2001) and came up with the poem below that describes the last minute in an English teacher's life. The ELT teacher peculiarly suffered from English spelling; here is the poem:

#### **"The Story of A minute"**

A terrible pain in the **head**,  
My face went dreadfully **red**.  
It almost smoked,  
And I nearly choked.

Spelling drove me **insane**,  
And I couldn't stand the **pain**.  
I called the doctor but answered the **nurse**,  
Who was writing some English **verse**,  
Which made my case even **worse**.

I was **dizzy**,  
And the doctor was **busy**.

What a **shame!**  
 She asked why I called, what is my **aim?**  
 And wanted me to **spell** my **name!!!**  
**Spelling:** I said “**No!**”  
 She thought I did not **know!**  
 That made my head **blow**  
 I fell off the **bedside**  
 Open-**eyed,**  
 With little **pride,**  
 With no **guide**  
 I barely **tried...**  
 And eventually committed **suicide!**

It is very clear teaching ESL/EFL pronunciation is crucial because of this inconsistent, irregular, and weird connection between spelling and pronunciation.

### C. Teaching Pronunciation and the Noticeability Hypothesis

Research-based theories support the practice of explicit teaching of pronunciation, which is augmented by Schmidt’s noticing hypothesis. It is assumed that when learners’ attention to specific areas in the target language, including pronunciation, is drawn and increased, their acquisition and retention of the target language is improved (Godfroid et al., 2013). There are predictable pronunciation challenges in the target language based on the nature of the learners’ first language. Each language learner has already internalized and integrated a phonemic inventory in the brain; this inventory influences how learners perceive and intake the target language phonemic inventory. Common grounds between both inventories cause positive transfer; however, phonetic features of the target language that do not exist in the learners’ L1 phonemic inventory pose challenges. It is when they notice and practice these areas of challenge that they can overcome them and communicate intelligibly and effectively (Derwing et al., 2009). There is evidence in research studies that direct instruction of ESL/EFL pronunciation in the classroom and explaining the difference in pronunciation between L1 and L2 improve pronunciation and language learning (Counselman, 2015).

### D. Validity Says “Teach Pronunciation”

Validity is one of the basic assessment principles in ESL/EFL, linguistics and actually all disciplines. It simply means that if teachers test something, they must teach it to their learners or test takers (Hogan, 2007). Language proficiency is measured by using standardized high-stake tests such as TOEFL, IELTS, and other tests. These tests include sections that test all language skills including pronunciation which appears clearly in their rubrics and rating scales. The point is simple then: if you test pronunciation to measure language proficiency, you then have to teach it in order to abide by the principle of validity.

### E. Why Teachers Avoid Teaching Pronunciation

It is evident now why ESL/EFL pronunciation should be given the same priority that other language skills such as grammar, vocabulary, reading, writing, listening, and speaking take. Despite that, quite a good number of ESL/EFL teachers feel less confident and avoid teaching pronunciation systematically or in a planned manner (Macdonald, 2002). Some argue that it is due to lack of proper materials and the scarcity of pronunciation activities in the ESL/EFL curricula. Others might argue that pronunciation is not given full attention to promote social justice, advocate equity, combat discrimination against nonnatives, resist the native-factor or native-speakerism and imperialism of BANA countries (Nair et al., 2006). Seeking to become native-like could be very discouraging for both language learners and teachers. It is good to consider translanguaging or accent addition instead of the commercially notorious accent reduction. When teaching pronunciation targets comprehensibility and not mimicking certain accents, it becomes doable (Medgyes, 2017). Teachers also need to prioritize and teach key pronunciation features that influence comprehension. As mentioned earlier, suprasegmental features such as intonation and stress are key to comprehension and communication and the concept of thought groups is at the core here (Murphy, 2020).

## III. THOUGHT GROUPS AND THE IMPORTANCE OF TEACHING VOWELS

When speakers or users of English communicate orally, they usually pause at certain intervals after each utterance or after each meaningful and relatively short string of words. This string of words is known as a *thought group* (Levis & Grant, 2003) that consists of a number of syllables with one prominent syllable. Phoneticians sometimes call the *thought group* a *tone-unit* and label the stressed or prominent syllable in it as the *tonic syllable* (Roach, 2009). If the tonic syllable changes, the pause we make at the end of each thought group changes as well and so does the meaning. In writing, punctuation helps readers know where to pause. To further clarify this, look at the pairs of examples below where each thought group is underlined separately, and the stressed tonic syllable is in bold. More details and comments are provided in parentheses to emphasize the importance of making the right pause at the right time after deciding which syllable or syllables to stress.

A. *Examples of Thought Groups*

- Let's eat, mom. (2 thought groups. Meaning: A child or children calling their mom to eat with them.)
  - o Let's eat mom. (1 thought group. Meaning: A cannibalistic child talking to other children and inviting them to eat their mother together.)
- Rachel Ray finds inspiration in cooking, her family and her dog. (3 thought groups. Meaning: Ray likes 3 things: cooking, her family, and her dog.)
  - o Rachel Ray finds inspiration in cooking her family and her dog. (1 thought group. Meaning: Cannibalistic and animal-eating Ray likes cooking her family and cooking her dog too.)
- A woman without her man is nothing. (2 thought groups. Meaning: Man is very important for women.)
  - o A woman: without her, man is nothing. (3 thought groups. Meaning: Man has no value when women leave him.)

This means that making the right pause counts: “A pause in the wrong place, an intonation misunderstood, and a whole conversation went awry” (Forster, 2020, Chapter XXXI). This shows very clearly that intonation, stress and grouping thoughts, all of which are controlled by vowel peaks in stressed syllables, are extremely important. To decide on what can be prioritized when it comes to teaching pronunciation, we should briefly analyze one thought group.

B. *Thought Groups as Pyramids*

Thought groups can be compared to pyramids with stressed syllables as the peaks of these pyramids (Gilbert, 2008). Each thought group has a focus word, which is usually a content word [*noun, verb, adjective or adverb*] uttered near the end of the thought group. For example, the disyllabic noun “*sushi*” is the focus content word in the thought group “*How do you cook sushi?*”. If the focus word is monosyllabic such as “*rice*” in “*How do you cook rice?*”, it is also the stressed syllable. The stressed syllable in “*sushi*” is the first syllable and the peak vowel is /u:/, which is illustrated in the figure below:

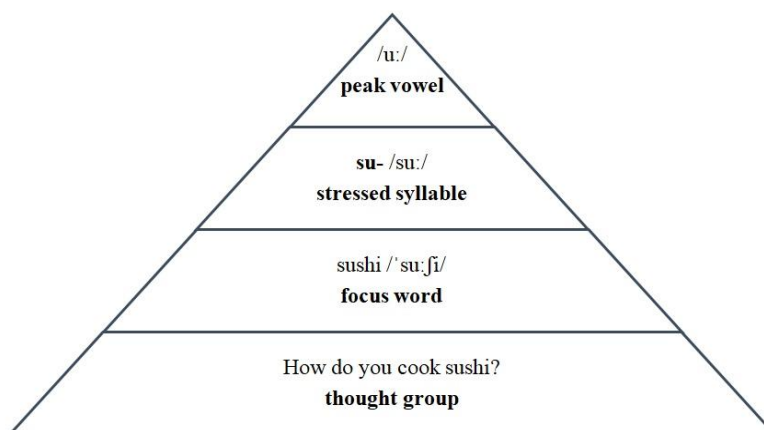


Figure 1. Example of a Thought Group Compared to a Pyramid With a Peak Vowel

This means that vowels control stress which controls intonation and thought-grouping; therefore, teaching vowels to EFL/ESL learners is of top priority to enhance clarity, communicative competence and fluency.

IV. TRADITIONAL AND SEMI-TRADITIONAL APPROACHES TO TEACHING VOWELS

Articulatory phonetics is the classic and traditional method of teaching English sounds including vowels; it is a discipline that describes the vocal apparatus or vocal system organs and what happens when different sounds are articulated (Bickford & Floyd, 2006). Articulatory phonetics aims at distinguishing different sounds by describing articulators and points of articulation involved in the production of each sound. This discipline usually starts with physiology of speech describing the vocal tract that starts at the pharynx and reaches either the oral or nasal cavity (Freeman & Freeman, 2004).

Articulatory phonetics uses basically three criteria to differentiate and identify vowel sounds: tongue height, part of the tongue involved in articulating specific vowels and lip rounding (Bieswanger & Becker, 2010). It also involves other criteria such as length and tenseness and uses a set of terminology such as high, low, mid, front, back, central, rounded, unrounded, short, long, tense, and lax (Davenport & Hannahs, 2013). Articulatory phonetics sometimes describes extreme points or vowel sounds that do not exist in English and use them as reference points; they label them as cardinal vowels (Ogden, 2009).

Articulatory phoneticians use a table or grid replicating the human tongue showing where each vowel is produced in the oral cavity, and they use certain color or shading codes to point out characteristics like lip-rounding and tenseness. Each vowel is represented by using a different symbol, and unfortunately different linguists, lexicographers and

phoneticians use different symbols. The common set of symbols is known as IPA or International Phonetic Alphabet. Below is the graphic representation describing vowels; those with a black background are tense vowels and the rest are lax. The areas in the table that are highlighted in gray include rounded vowels and the rest are unrounded.

|               |      | Position of the Tongue  |                      |                                       |
|---------------|------|-------------------------|----------------------|---------------------------------------|
|               |      | Front                   | Central              | Back                                  |
| Tongue Height | High | /i:/ (see)<br>/ɪ/ (it)  | /ɜ:/ girl            | /u:/ (zoo)<br>/ʊ/ (put)               |
|               | Mid  | /eɪ/ (day)<br>/e/ (met) | /ə/ about<br>/ʌ/ cut | /əʊ/ coat<br>/ɔ:/ thought<br>/ɔɪ/ toy |
|               | Low  | /æ/ (cat)               | /aɪ/ bye<br>/aʊ/ now | /ɔ/ job                               |

Figure 2. Graphic Representation of English Vowels

This conventional method of teaching vowels could be suitable to students majoring in linguistics and might not be suitable for ESL learners for several reasons including the use of jargon such as diphthongs, triphthongs, neutral, spread ... etc. It also uses symbols that are not part of the English alphabet, which makes learning a language a bit overwhelming and confusing because different books and dictionaries use different symbols. Technology and smartphones apps introduced a semi- or less traditional manner of doing the same thing using the same but clickable charts. There are several phonemic charts online, but several of them require certain browser extensions; an easy-to-use one is found on the English Club website (“Interactive Phonemic Chart,” n.d.). However, the use of weird symbols is still there. Teachers can still use it as a reference, but there must be more effective and learner-friendly methods.

## V. TWO SUGGESTED APPROACHES TO TEACHING PRONUNCIATION

Teaching pronunciation becomes fun when it is integrated effectively into classroom activities (Underhill, 1994) in a way that appeals to all or at least most learners. In addition to attempting to make it fun, teachers and learners’ attitude about pronunciation should be a positive one (Dale et al., 2005). Instilling the concept that it is ok to be different and to have a foreign accent, because we all actually have one. As long as we speak English intelligibly and comprehensibly, we should not worry at all. Instead, we should be proud that we have our unique, and understandable, way of speaking English.

When we set realistic and attainable goals to ESL learners, we maintain and even boost their motivation and reduce their anxiety; motivation is a key success factor in language learning (Lightbown & Spada, 2006). Setting unrealistic goals such as attempting to have a native-like accent will lead learners to frustration and failure. Native English accents vary widely, which makes the unrealistic task even more unrealistic and undoable. As mentioned earlier some teachers avoid teaching pronunciation because they are not happy about having a foreign yet intelligible accent. This means that some teachers themselves need to tweak their attitude and gear it toward a more positive direction. Isn’t it sufficient to say that if all non-native English teachers did not teach English, more than half the world would not be able to speak it? (Yates et al., 2009) Learning and teaching English pronunciation should not be affected or judged by the what is known as the native-factor which could be a mere accident of birth (Richardson, 2016).

### A. Color as the First Approach

As for the two suggested approaches of teaching and integrating vowel sounds into the curriculum, they are both based on the theory of connectionism in second language acquisition (Gass & Selinker, 2000). When learners link or associate each vowel with something easy that they like, they can easily acquire, integrate, and ultimately retrieve it.

The first suggested approach capitalizes on the concept of acrophony which we commonly use when dictate alphabetical letters; it is like when we say “A as in apple, B as in ball, ... etc.” Acrophony is used in multiple manners as per the user’s performance. For example, English teachers might say “A as in adjective, B as in in bilingual, C as in countable, ... etc.” Acrophony is easily implemented with spelling and alphabet letters, and in the same way it can be used with vowel sounds through linking each sound with a certain color. Research shows that there is a relatively strong and positive link between the notion of color and language learning (Khan & Liu, 2020).

Karen and Thompson (2013) created a vowel chart like Figure 2 above but they used colors as example words to facilitate learning and practicing different vowel sounds. There is a clickable and interactive vowel chart in the Color Vowel Chart website; this chart is a useful visual tool or organizer that helps learners acquire and produce English vowel sounds in an appealing way (Karen & Thompson, 2013). Below is a replicated graphic representation of the traditional vowel grid adding the color examples:

|               |      | Position of the Tongue |             |              |
|---------------|------|------------------------|-------------|--------------|
|               |      | Front                  | Central     | Back         |
| Tongue Height | High | /ɪ/ (green)            | /ɜ:/ purple | /u:/ (blue)  |
|               |      | /ɪ/ (silver)           | /ʌ/ mustard | /ʊ/ (wooden) |
|               | Mid  | /eɪ/ (gray)            |             | /əʊ/ rose    |
|               |      | /e/ (red)              |             | /ɔ:/ orange  |
|               | Low  | /æ/ (black)            |             | /aɪ/ white   |
|               |      |                        | /aʊ/ brown  | /ɔ/ olive    |

Figure 3. Color Vowel Chart

Using this chart, instead of saying that the vowel in words like “cat, mat, hat ... etc.” is a low, front, lax unrounded short vowel, learners can simply say “the black vowel”. Colors are used as anchor words to easily pin how each vowel is perceived and produced to the memory. Most of the color anchor words are monosyllabic, but all words and even phrases have colors. A phrase or multisyllabic word gets its color according to the peak vowel of the prominent stressed syllable, also known as the tonic syllable in the thought group. Examples are provided below for further clarification; the stressed syllable is underlined, and the color of each peak vowel is provided in parentheses:

- information (gray)
- psychology (olive)
- on the desk (red)
- tie the knot (olive)
- sharp cookie (wooden)

*B. Noisy Colors or Colorful Noises as the Second Approach*

Associating vowel sounds with colors is suitable for learners whose learning style preference is the visual one, but not all learners prefer to learn visually. There are some special groups of ELLs (English language learners) who cannot learn visually because they have genetic vision issues. Catering for learners with special needs such as the visually impaired and blind ones is of extreme importance. Sighted people can distinguish colors easily and clearly, yet all colors are the same for visually impaired learners. In this case, noises can replace colors when we describe, teach and practice vowel sounds because this special group of ELLs access ESL/EFL pronunciation or any skill via the ear.

It should be noted though the mention of colors for visually impaired learners is not an unwise decision because they know colors do exist: they just cannot perceive them. Instead of replacing colors with noises, we can use them together and create a new chart of vowels labelling it the Noisy Color Vowel Chart. Visually impaired learners are great thinkers who can do a world of things like hearing, touching, using cognitive and meta-cognitive skills ... etc., to name only a few. The only thing they cannot do is use eyes to access the external world, but they have their own unique and powerful 20/20 channels of contacting the world around them.

When we teach ESL/EFL to visually impaired learners, a good deal of adaptation and accommodation is needed to help them reach their full potential; therefore, the second suggested approach or teaching tool is “The Noisy Color Vowel Chart”.

|               |      | Position of the Tongue           |                               |                              |
|---------------|------|----------------------------------|-------------------------------|------------------------------|
|               |      | Front                            | Central                       | Back                         |
| Tongue Height | High | /ɪ/ (bleating sheep/green)       | /ɜ:/ (chirping bird/purple)   | /u:/ (looney goose/blue)     |
|               |      | /ɪ/ (ticking 'n clicking/silver) | /ʌ/ (dummy duck/mustard)      | /ʊ/ (good woodpecker/wooden) |
|               | Mid  | /eɪ/ (neighing bray/gray)        |                               | /əʊ/ (phone tone/rose)       |
|               |      | /e/ (echoing bell/red)           |                               | /ɔ:/ (long snore/orange)     |
|               | Low  | /æ/ (happy laughter/black)       |                               | /aɪ/ (violent tiger/white)   |
|               |      |                                  | /aʊ/ (resounding sound/brown) | /ɔ/ (fox in the box / olive) |

Figure 4. Noisy Color Vowel Chart

VI. SUGGESTED ACTIVITIES ADOPTING THE TWO NEW APPROACHES TO TEACHING PRONUNCIATION

There are lots of classroom activities that can involve any or both the suggested approaches/tools above. It depends on the nature of target learners and their learning styles and preferences. Students can sort words or target vocabulary according to the color of their stressed syllables. They can even write or type them using these colors.

Students can also play the “Dominant Colors and Odd One Out”. They are given lists of the target vocabulary and they decide on the dominant color while deciding which one is the odd color out and what color this word is. The table below is a sample of this activity with answers.

TABLE 1  
ODD ONE OUT GAME

| Dominant Color | Black   | Blue   | Brown  | Green   | Gray   |
|----------------|---|--|--|---|--|
|                | Gymnastics<br>Balance<br>Champion<br>Character (N)<br>Dynamic<br>Fantastic<br>Produce (V) | Balloon<br>Vow<br>Communicate<br>Improve<br>Reassuring<br>Secure<br>Truthful | Allowed<br>Belief<br>Powerful<br>Shout<br>Shroud<br>Tower<br>Pronounce | Believe (N)<br>Genius<br>Esteem<br>Leader (N)<br>Peaceful<br>Debate<br>Unique | Inspirational<br>Erase<br>Humdrum<br>Aflame<br>Prepared<br>Transformation<br>Station |
| Odd One Out    | Produce<br>Blue   | Vow<br>Brown   | Belief<br>Green  | Debate<br>Gray  | Humdrum<br>Mustard   |

ESL/EFL teachers can provide learners with the color vowel chart in a worksheet and ask students to add words to them. Teachers can play games such as word mazes, bingo, word dominoes or scattergories including the color vowel chart or the noisy color vowel chart. All these tasks, activities and games enhance pronunciation as well as vocabulary. The updated version of the vowel chart including noises is the idea of the author of this article and no research has been done related to it, but there is research related the Color Vowel Chart as shown in the next section.

#### VII. LITERATURE AND RESEARCH RELATED TO THE COLOR VOWEL CHART IN THE LAST EIGHT YEARS (2014 – 2022)

The teaching tool or strategy known as the Color Vowel Chart is relatively new and research conducted to test its effectiveness is not so common; there are a few studies and articles discussing this tool as shown in this section. On the website of one of TESOL organization affiliates, New York TESOL, Nau (2014) emphasizes the importance of pronunciation not only for oral or spoken skills, but also for all language-related skills including writing. Some students write inappropriately or incorrectly because they either perceive or produce some sounds incorrectly. For example, some students write “should of” instead of “should’ve” due to incorrect perception of pronunciation (Nau, 2014). As a result of this, teaching pronunciation creatively and adopting effective out-of-the-box techniques, strategies and tricks are essential for improving learners’ speaking skills and their output intelligibility.

On the article written on the New York TESOL website, Nau (2014) recommends eight hands-on strategies and tricks for ESL/EFL teachers to use when dealing with pronunciation. One of these tricks is called the Rainbow Trick, which is Nau’s (2014) suggested name for the Color Vowel Chart. Nau (2014) suggested this appealing name for the implementation of this tool in the ESL/EFL classroom and wrote in its favor as a powerful teaching tool especially when dealing with vowels and stress. Nau (2014) confirmed that the available resources on its website facilitate the teaching and learning of vowels and stress to a great extent.

The Color Vowel Chart is available basically as an online resource or tool and Datko (2015) wrote an article in which he evaluates internet or online-based resources that can be used in the ESL/EFL classroom especially when dealing with pronunciation. Using theoretical benchmarks and criteria supported by second language acquisition research as well as practical recommendations by ESL/EFL practitioners, instructors, and teacher trainers, Datko (2015) evaluates some online pronunciation teaching media resources and provides useful recommendations for ESL/EFL student teachers, novice teachers as well as experienced ESL/EFL ones. Datko (2015) looked at the Color Vowel Chart as a pedagogically appropriate online teaching tool especially when introducing and practicing individual phonemes. According to Datko (2015), the Color Vowel Chart – when properly used – can potentially assist in the accurate perception, interesting practice, and comprehensible output of vowel phonemes. The Color Vowel Chart adopts color codes which learners are highly expected to like, and which adds interest to the process of drilling individual vowel sounds. By depending on linking each distinct vowel sound to a color, this chart cleverly avoids using metalinguistic terminology or jargon that students find overwhelming, complicated, incomprehensible, and even sounding non-English. In addition to its simplicity and its potential to keep learners involved while learning phonetics and pronunciation, Datko (2015) further commends the Color Vowel Chart as a learning facilitating tool that is suitable for a wide range of age groups and English proficiency levels.

In a paper that was recently written, the Color Vowel Chart is recommended as a useful tool in teaching North American as well as Canadian accents in English (Fanenshtel, 2017). The author provides sample tasks and activities that can be used in the ESL / EFL classroom to assist learners with their pronunciation. Fanenshtel (2017) commends the concept of using colors and key words to represent different vowel phonemes instead of using phonetic transcription or IPA (International Phonetic Alphabet). For example, to represent the peak vowel sound in the word “hurt”, the color and key word “purple shirt” are used. To prove the efficacy and pedagogical benefits of using the Color Vowel Chart, Fanenshtel (2017) refers to its use in several reputable educational organizations in Canada and North America; it is also found on the website of US State Department. RELOs (Regional English Language Offices) in various US

embassies distribute the Color Vowel Chart cards and arrange training to local teachers. For example, the author attended the training given to Ukrainian English teachers during a training university course.

Fanenshtel (2017) noticed that the Color Vowel Chart directs students' attention to phonemes rather than spelling and assists them to overcome stress errors as one word could have two different pronunciations as a result of shifting stress. For example, the word "object" is *red* as a verb due to having stress on the second syllable; however, the same word is *olive* when used as a noun because stress is on the first syllable. Fanenshtel (2017) concludes the paper with different groups of suggested activities according to the learners' proficiency level.

Kone et al. (2019) carried out relevant research with the purpose of testing the efficacy of the Color Vowel Chart. The researchers did action research in the Indonesian district of Majauleng and introduced the Color Vowel Chart in an experimental group of 20 students at grade eight, and there was another group of 20 students who were not taught pronunciation using the Color Vowel Chart. Both groups included a balanced representation of male and female students. For example, there were 10 male and 10 female students in the experimental group of students who were taught using the Color Vowel Chart. The action researchers, Kone et al. (2019), conducted a pre-test before delivering the pronunciation course and a post-test at the end of the course. After comparing the mean score of both tests, researchers found a significant difference because the score is 78 in the pre-test but increased 7 points reaching 85 in the post-test. This supported the researchers' assumption that the Color Vowel Chart and its proper use in EFL classes in pronunciation courses can make a significant difference and improve the learners' pronunciation, speaking and communication performance. It is because pronunciation is inextricably connected to both speaking and communicative competencies. In other words, enhanced pronunciation develops speaking skills and subskills and as a result it facilitates and boosts communication.

Kone et al. (2019) mentioned in their study that using the Color Vowel Chart in EFL speaking classes is not just effective, but it could serve as a solution or remedy to oral problems that students face in speaking including psychological or emotional ones. It was noticed that the Color Vowel Chart increased the students' active participation and raised their motivation and class involvement. It was also noticed that the Color Vowel Chart encouraged the learners to work collaboratively in pairs and groups applying the pedagogical principle of scaffolding and assisting each other in learning challenging phonemes, particularly long vowels, and diphthongs. Kone et al. (2019) confirmed that the Color Vowel Chart enhanced the learners' active involvement because these same learners perceived it as a game rather than a learning or teaching instrument. Overall, the researchers in this study provided evidence that using the Color Vowel Chart properly improves EFL learners' pronunciation.

In a teaching tip presented in the tenth Annual PSLLT (Pronunciation in Second Language Learning and Teaching) Conference in Iowa State University in Fall 2018 and published in the conference proceedings the following year, Wallace and Fernandez (2019) warn against the possibility of some ELLs misplacing and mistaking stress at the word and phrase level as a result of insufficient teaching and practice of important aspects of English pronunciation. Confusing and misplacing stress could highly result in misunderstanding, inaccurate output, or even unintelligible messages, which affects communication. The researchers confirmed that communication is not negatively affected by accent variety, but mainly by misplacing stress especially when the context is not helpful enough to make inferences of the intended message. Wallace and Fernandez (2019) mentioned that learning vowels and stress could be very challenging; however, they suggest a teaching tip to overcome this challenge through using the Color Vowel Chart and some features of a relevant application known as Blue Canoe which was developed to accompany the Color Vowel Chart. Wallace and Fernandez (2019) draw the readers' attention to the poor connection between English spelling and English pronunciation especially when we consider vowel sounds and how they are orthographically represented in various and confusing patterns. The researchers stated the problem, yet they also offered the solution, which is the adoption of the Color Vowel Chart pronunciation teaching approach. Wallace and Fernandez (2019) state that the Color Vowel Chart is particularly helpful for students whose mother languages, accents or dialects have different vowel inventories and/or different stress patterns.

The initial stage of the Color Vowel Chart pronunciation teaching approach starts when instructors do a needs analysis by prompting the students to pronounce words of high frequency, and then the instructors can create inventories and wordlists of mispronounced words as a result of misplacing stress and confusing vowel sounds. Instructors here include mispronounced lexical items and phrases that could impact comprehension. The list or inventory of these items should be left open throughout the semester for ELLs and the teacher to add more items to it. Wallace and Fernandez (2019) suggest using a Google form or any type of shared document which ELLs and the teacher can frequently add items to.

The second step in this approach capitalizes on learner autonomy as ELLs are given these lists of words to know the number of syllables in each word and determine which of these syllables is the peak /stressed one. Then they are asked to categorize these words according to the color of the stressed syllable using the Color Vowel Organizer: a graphic design in form of a table with a slot for each vowel according to its matching color. ELLs are trained to easily identify, and practice peak vowel sounds by looking at the Color Vowel Chart and deciding to which color the stressed or peak syllables in example words and phrases belong. ELLs are encouraged to use reliable dictionaries to check their answers. ELLs are also encouraged to use the dictionary that comes with Blue Canoe app and YouGlish, which is a video database website developed mainly to assist its users in enhancing their pronunciation in 3 major accents: US, UK, and

Australian varieties. Learners are free to choose and stick to any preferred variety. This way of learning through discovery helps ELLs retain the accurate pronunciation and via sufficient practice, they can retrieve it.

The third step in this Color Vowel Chart approach suggested by Wallace and Fernandez (2019) is based on the pedagogical principle of collaboration and scaffolding as ELLs cross-check their pronunciation of the words in the list and see together what syllable is the peak one and its color in the chart. Teachers can provide feedback here when necessary, and ELLs can use reliable online dictionaries to come to a consensus.

The fourth step, which is interesting and involves the class and gets them to substantially and subconsciously practice vowel sounds and stress, is the game *color it out* during which students play a card game. The instructor gives each player from the students 4 cards and then keeps the rest of the cards with him / her. After shuffling the cards, he turns one of them face up and reads the color vowel with the example key word/s, “the green tea” card for instance, and any student who has a card with the same vowel raises his / her hand and pronounces it. If correct, he gives the card to the teacher. The first team to run out of cards is the winning team. As students do this, they practice the vowel sounds and stress excessively and in an indirect interesting way.

The fifth and last step of the Color Vowel Chart approach involves students in communicatively using target words with certain vowel sounds and stress patterns; students can provide definitions for the target words or use them in role play dialogues. Students record their output and do peer and self-evaluation to increase their accuracy in pronunciation. After applying this approach, the researchers interviewed the learners who confirmed how helpful the approach is, which is encouraging to other EFL / ESL instructors to experiment with the chart to help their learners’ fluency and communication. In the first chapter of her famous book about pronunciation, Jones (2015) suggests similar teaching tips, games, and activities that make use of the Color Vowel Chart.

According to Jones (2015), intelligibly articulated and correct pronunciation is a very important element in English language learning and acquisition; it is essential for improving linguistic proficiency and communication. There are claims in research related to second language acquisition, language learning, psycholinguistics and neurolinguistics that support the gravity of pronunciation in the process of language learning (Jones, 2015). Therefore, ELT instructors should plan to integrate it regularly into their instructional practices inside the classroom. Instead of ignoring it completely, EFL / ESL instructors can teach it along with other language skills such as speaking, vocabulary, grammar, ... etc. The Color Vowel Chart is suggested here as an untraditional technique, but ESL / EFL instructors are encouraged to choose other similarly modern techniques or traditional ones such as repetitions, recording, using minimal pairs, using tongue twisters, ... etc.

In addition to all reviewed studies above, a qualitative study conducted in Indonesia showed that using the Color Vowel Chart improves learning speaking and pronunciation (Syaifullah et al., 2022). The chart is an effective teaching tool and learning aid in EFL pronunciation instruction and learning; it provides students and teachers with an easy and interesting approach to learning and teaching pronunciation at both the lexical and short phrase levels. According to Syaifullah et al. (2022), the Color Vowel Chart as a pedagogical technique is successful because it focuses on a very important suprasegmental feature in English pronunciation. It focuses on stress which controls rhythm, the sequence of unstressed and stressed syllables. This sequence makes the learners’ comprehension easy and makes their pronunciation comprehensible. Rhythm is vital because it affects clarity, accuracy, and fluency, all of which are necessary for smooth communication. Syaifullah et al. (2022) illustrate and analyze the use and details of the Color Vowel Chart by referring to its official websites. Syaifullah et al. (2022) explored a lot of relevant primary and secondary sources related to the pedagogical use of the Color Vowel Chart and recommended that EFL teachers increase their teaching or classroom time in speaking and pronunciation-related areas as most teachers give priority to reading and writing. Syaifullah et al. (2022) found that instructors who used the Color Vowel Chart in their teaching made a difference in their students’ pronunciation and confirmed that the chart was an interesting alternative to the use of phonemic symbols to explain pronunciation issues to learners. The researchers confirmed that using the Color Vowel Chart improves other aspects of the language other than pronunciation; it was noticed that it improves vocabulary learning in particular.

## VIII. CONCLUSION

Teaching pronunciation, particularly vowels, is of top priority and all ESL/EFL materials should include relevant activities and lesson plans targeting teaching this important component of the English Language. Language educational leaders and administrators need to explore ESL/EFL teachers’ attitudes toward teaching pronunciation and gear it in the right direction in case these teachers eschew this practice. Associating pronunciation lessons with concepts that learners like and remember easily such as colors and noises can be very useful in the ESL/EFL learning process. The article presented two suggested tools or approaches to teaching vowels sounds, suggested relevant classroom activities, and explored relevant modern research studies that investigated the efficacy of using color in teaching pronunciation. More relevant teaching methods that keep ESL/EFL learners involved need to be explored; furthermore, more research particularly scholarly and action research is recommended in the area of learning and teaching ESL/EFL pronunciation.

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