How to Teach Vowel Sounds in Primary School: The Silent Way

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Introduction

While the prominence of proposed model approaches to the teaching of vowels in the English language signified the agreement of language teaching specialists, educational institutions, as well as academics, Richards and Rodgers, (2014) contend that there are a number of proposed teaching models that are an attribute of singlehanded efforts of individual language teaching educators. These models, primarily convey their personal views regarding the manner in which language teaching should be handled in the classroom. This is exactly the case with the silent way. The current paper presents a description of the sound/colour chart emphasizing that in teaching of vowel sounds at the elementary level, a focus on pronunciation plays a central role in learning the English language among Saudi native Arab learners. It recounts how the sound colour chart was the product of earlier approaches to teaching literacy. The result of these earlier efforts was a chart that presents a number of things that English as a Foreign Language (EFL) teachers should avoid. The proposals for teaching 4th, 5th and 6th graders modify the original chart to not only fit native Arab speakers, but also serve the specific objective of teaching English as a second language (ESL) to Saudi students while giving emphasis to both the silent way and the chart. The analysis describes a lesson in which the teacher uses the sound colour chart and list a number of issues to which an English teacher in a native Arab speaking class in Saudi Arabia needs to pay particular focus.

Summary

Primarily, the silent way represents a technique of teaching language designed by Caleb Gattegno (Richards & Rodgers, 2014). Gattegno's name is familiar among linguists, an attribute of his efforts towards the revival of interest in the use of coloured wooden sticks known as Cuisenaire rods as well as his series *Words in colour*. The latter was an approach to

the teaching of initial reading in which language teachers coded sounds with specific colours (Richards & Rodgers, 2014). Richards and Rogers, (2014) continue to note that Gattegno produced extensive reading materials for English teachers that have continued to be distributed across educational institutions in the state of New York. The Silent Way model was the authors attempt to venture into foreign language teaching. The model is developed in such a way that the lesson progresses through several phases that begin in a manner similar to the way teachers begin pronunciation practice lessons. In the next stage, the learners are taught simple sentence patterns as well as vocabulary structures. The underlying principle that characterizes the silent way is the emphasis on the teacher remaining silent in class to the maximum possible extent while the learner is encouraged to produce as much language as they possibly can (Richards & Rodgers, 2014). Elements of this model, with a specific emphasis on the use of colour as well as coloured Cuisenaire rods, were the product of the inventor's previous experience in education reading and mathematics program design. The development of Cuisenaire rods is credited to George Cuisenaire, an educator from Europe that deployed them for teaching mathematics. From Gattegno's observation in relation to the use of Cuisenaire rods, he came up with the idea of applying the technique in language teaching. However, the application of Cuisenaire rods for the silent way is modelled alongside conventional structural and lexical syllabus whereby it is characterized by several features familiar in the traditional methods. Among these features are situational language teaching and audiolingualism in which there is a strong emphasis on accurate repetition of sentences. The teacher initially models these sentences and proceeds to move through guided elicitation exercise that prompt learners to freely invoke them during communication exercises.

The Sound Colour Chart

Teachers around the world have developed sound colour charts in many languages for close to four decades (Cherry, 2002). The sound colour chart primarily reflects several

coloured rectangles whereby each rectangle either corresponds to a single sound or a certain number of sounds in the target language. The specifics of the given language, as Cherry, (2002) continues to explain determine the number of rectangles that a teacher can use as well as other characteristics of the chart – these may for instance, include the layout of the rectangles. The current description will employ the pronunciation science (PronSci) charts. The PronSci rectangular charts are developed from an articulatory point of view. As such, each rectangle in these charts represents a given English sound.

British English Layout Notes

The English language generates two types of vowel sounds as well as diphthongs in which a vowel sound glides towards a reduced sound in one syllable. When articulating tense vowels, an English speaker generally feels it is long. Tense vowels can appear in a syllable wither with or without an attached consonant at the end for instance like is the case in the following words: *heed, she, beet.* This contrasts with lax vowels in which when an individual articulates them, they are felt to be short. This type of vowels only appear in syllables with an attached final consonant at the end for instance like is the case in the following lexical items: *head, bit.* The English language make two more distinctions whereby in the first distinction, reduced sounds and full vowels are differentiated and are illustrated with dots and rectangles as shown in Fig. 1 below respectively. In the second distinction, unstressed and stressed vowels are differentiated as pointed at the bottom of the chart in Fig. 1 below. Examples of lexical items that employ reduced sounds schwu include *to Italy* and *influence*, while the reduced sound schwa, is illustrated with the words *happy, coming, between and indeed*. The reduced sound shwa on the other hand, can be found in *caterer, about,* and *terrain.* Reduced

sounds together with the two placeholders found in unstressed vowels are located at below the chart in figure 1 below. This region is used to point all unstressed vowel sounds.

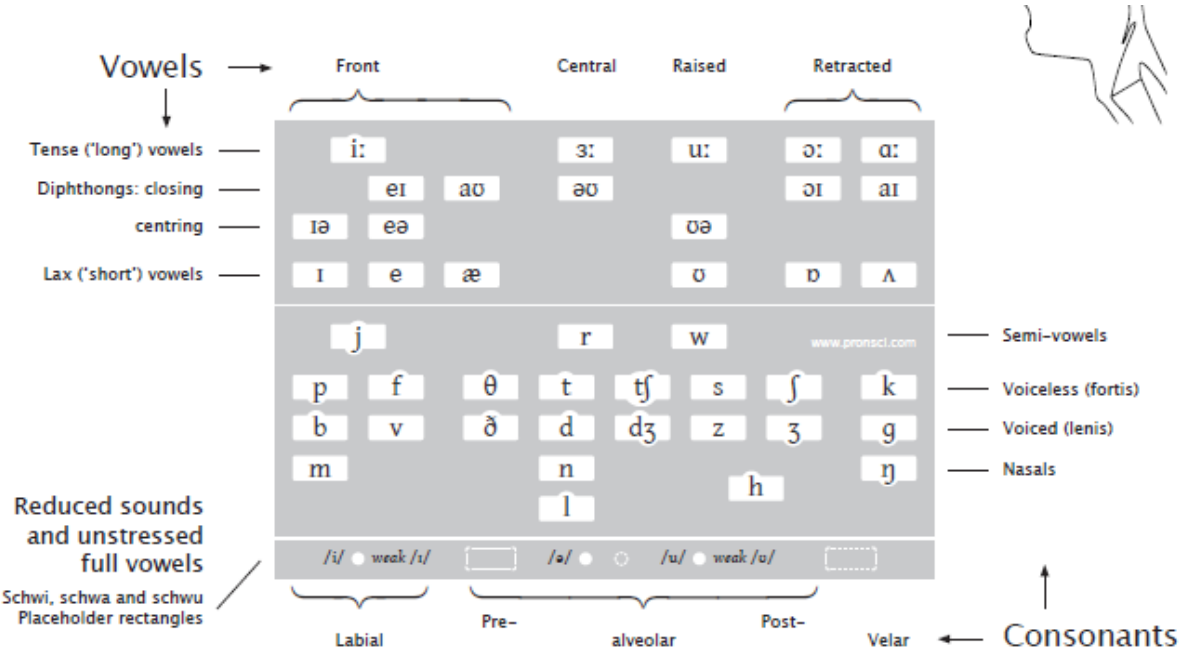

Figure 1: Black and White British English Layout of the rectangular chart

Source: (Pronunciation Science, 2017a)

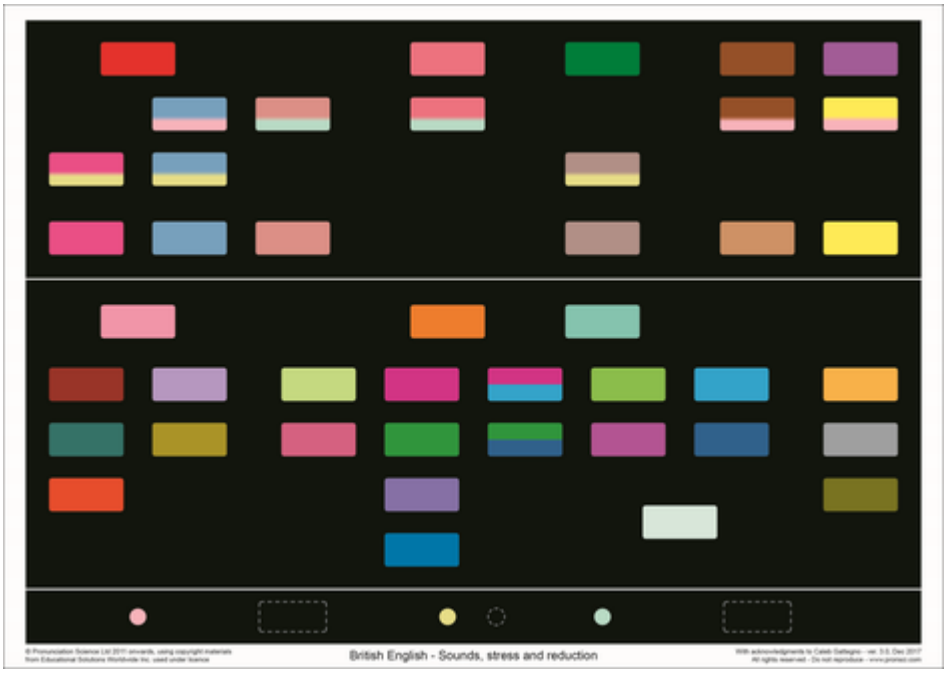

Figure 2: Colour British English Rectangle Chart

Source:(Pronunciation Science, 2017b)

The British English rectangular chart illustrated in Fig. 1 and 2 above is primarily a reflection of the accent that is commonly referred to in linguistics as modern Received Pronunciation (RP) or BBC English. This differs from American English. It is important to note that the exact values that a teacher assigns the colours is up to them. For this matter, the British English rectangle chart satisfactorily functions for all inventory of sounds spoken in the non-rhotic dialects that people elsewhere in the UK speak as well as the variety spoken in New Zealand, South Africa, Australia, and even in Saudi Arabia.

On the rectangle charts, the teacher represents the sounds by rectangles that either contain IPA symbols are depicted in corresponding colours. The first characteristic when developing both the coloured and black and white rectangles is dividing them into three major sections. While the topmost section illustrates strong or full vowels, the bottom section on the other hand, illustrates weak vowels – these group of vowels is represented with dots. The middle section contains consonants. After generating the resulting simple division, the teacher uses the designs to act as standard phoneme charts that illustrate complete inventories

of the sounds of the English language. This approach to arranging English language sounds generates a number of advantages over other phonemic charts. It is important to however note that the chart designs here additionally uniquely support a more comprehensive perception of the English sound system thus it can discriminate between the three classes of vowels that can be placed in a syllable. The first type is the weak reduced vowel indicated by the number one in Fig. 3 below while the second type of vowel is the full unstressed vowel. The third type of vowel that can appear in a syllable is the full stressed vowel and may be given prominence if it is accented – '3', '4', and '5' in figure 3 below.

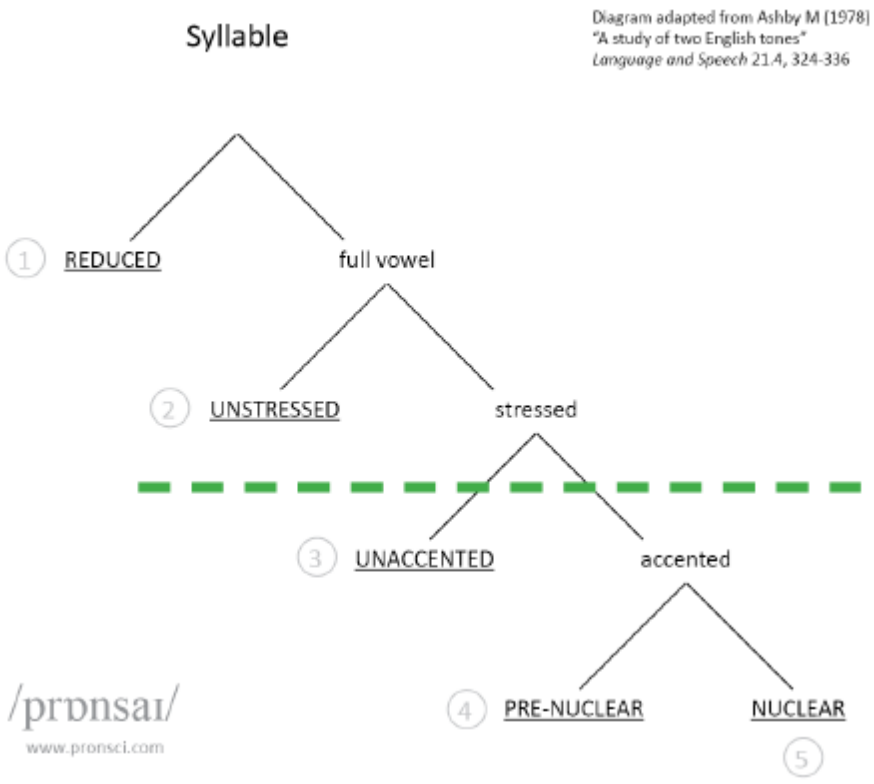

Figure 3: Reduced and full vowels

Source: (Pronunciation Science, 2017b)

When the chart is employed this way, the top chart depicts stressed vowels as is the case in '3', '4', and '5' in figure 3 above while all unstressed vowel sounds are found at the bottom of the chart. The full unstressed vowel sounds (indicated as 2 in figure 3 above) are

depicted using the placeholder rectangle while reduced vowels are illustrated using the dots (Fig. 4 below).

Figure 4: Vowel sounds continued

Source: (Pronunciation Science, 2017b)

The pointing of words using these advanced features allows the teacher to teach sounds by accurately depicting both the sound of the word as well as the accompanying stress pattern. By pointing up and down while remaining silent, the teacher relays the stress pattern to the student whereby an upward point represents a vowel in a stressed syllable while a downward silent point indicates the presence of an unstressed vowel sound in a syllable.

Weak Vowels

When the vowels are split across the top and bottom sections of the chart, it confirms the assumptions under the articulatory approach to teaching pronunciation in the English classroom. Such is the case that while the reduced or weak vowels fall to the bottom of the chart, the strong vowels on the other hand fall high up the chart. There are a number of differences that teachers should emphasize in order to help learners with the authentic production of these vowel sounds. Firstly, Catford, (2001) suggested that as opposed to treating weak vowels as total vowels yet they are hardly vowels at all, they should alternatively be treated as open transitions instead. This way, this sounds fall between strong vowel sounds and consonants. This is helpful from an articulatory point of view since vowels

treated as open transitions they appear between the articulation of the preceding and subsequent consonant sounds. In this sense, they are by products of these consonant sounds as opposed to actual vowels appearing in a syllable that would demand a separate articulatory input by the speaker (Pronunciation Science, 2017b). Moreover, although a learner can accurately articulate a weak vowel like is the case at the end of the words *to* or *happy*, they are nevertheless shorter in duration compared to strong vowels. Lastly, weak vowels, also call for a less degree of respiratory drive compared to strong vowels during production. However, this is usually stressed for native speaker children learning English as their first language.

The teacher, as Pronunciation Science, (2017b) explains, can draw distinctions between schwa as an open transition and the minimal sound schwa that is required in order to generate a syllable with the introduction of the unfilled and filled schwa dots like is the case at the bottom of fig. 4 above. Schwa, the minimal sound required in order to generate a syllable, is conceptually not a circle – on the contrary it is a dot of a similar colour as the chart background in Fig. 2 above illustrates.

Teaching the Two ways of Producing the Schwa

The schwa is reportedly, the most common sound in the English language. However, despite being the most common sound, learners find it uncharacteristically hard to produce this sound while teachers also experience difficulties when teaching students to produce it. This is the case because, learners are unusually unable to hear it, forcing the teacher to exaggerate its production in response. The result is that in making the schwa detectable, the teacher in turn misrepresents it in the end (Messum & Young, 2017). Saudi students, like any other ESL speakers usually bring with them a strong concept of the vowel sound from their native language. The problem that Saudi Arab speakers are likely to face regards the fact that their native Arab language is not characterized with the reduced sounds like is the case in

English. For this matter, the listen first approach is not fruitful in helping Saudi students to develop the new articulatory movements that their target English language demands. Primarily, although the schwa is traditionally analysed and presented as a single sound, it nevertheless needs to be regarded as comprising of two distinct sounds – at least from an articulatory point of view.

The first type of schwa, appears in the citation form of words that end in an open syllable like is the case in the word *to* or *tuna.* In this particular instance the sound is a weak vocalic articulation, a short vowel. The learner in this case produces it with the least amount of effort. The schwa here is perceived as a minimum sound that generates a syllable in the final position. When teaching this sound the teacher uses a pale yellow dot. More examples of this weak schwa appears in the following words: Monica, cheetah and comma. There is a second type of schwa that JC Cartford revealed. This second type of schwa as Messum and Young, (2017) commonly appears in spoken/running speech. Primarily, the production of this sound is an attribute of the different ways in which consonants appear. In the first instance, the authors contend that in pairs such as *train/terrain,* the word train is produced what Cartford referred to as a close transition between the initial consonants t and r. For this matter, when a learner articulates /t/ and /r/, the two sounds overlap whereby the speaker seamlessly moves from the first to the second. Primarily, in completing the articulation of sounds /t/ and /r/, the production tends to overlap and as such the learner seamlessly moves from /t/ to /r/. This contrasts with the production witnessed in the word terrain in which the learner completes articulation of the sound /t/. In this sense, the burst of aspiration is heard after the learner releases the tongue to free the airflow. Shortly after, the learner proceeds to produce the /r/. This form of articulation according to Cartford is referred to as an open transition between the two consonants. Primarily, the incidental sound that appears between the two sounds is not articulated at all. More importantly is the fact that although a schwa

appears between the two consonants, the student does not attempt to produce an actual vowel like is the case in strong vowels. However, despite this, owing to the incidental sound that is produced, the first consonant is articulated as part of a different syllable that is distinct from the second (Messum & Young, 2017). According to Cartford, the transition into a consonant that is the case for instance, in a word like *about* can also be regarded as an open transition (Messum & Young, 2017).

There are several other words in which open transitions appear such as *corpus, compete, and, nation.* In short phrases such as *resonants* and *fricatives* are further examples that illustrate the common occurrence of open transitions. They are indicated with a dot as opposed to a schwa in the illustration below.

/frɪk.tɪvz .n rez.n.nts/

This open transition type of schwa according to Messum and Young, (2017) is denoted with the use of a black dot in a chart. It represents the black space surrounded by a dashed circle. The idea is that as students get the fact that this object is intended to be perceived as a black dot as opposed to a dashed grey circle, the teacher can proceed to sink home the convention that any part of the black background of the chart can be used to denote an open transition.

A case in point is the open transition that appears between /f/ and /l/ in the construction *for lunch.* The teacher indicates this by simply pointing to the black background on the chart with the aid of a pointer as it moves between two consonant rectangles (Messum & Young, 2017). This approach is ideal owing to the fact that it speeds up the teacher's process of helping the learners identify open transitions which in the end ultimately gives them (learners) a good feel about their speediness in learning to identify the sound. According to Messum and Young, (Messum & Young, 2017) it will usually be obvious whether the teacher needs to either to the pale yellow or black dot in Fig. 2 above to indicate

the sound as a schwa. Nevertheless, the teacher needs to realise that when producing the schwa that appears at the end of a lexical item like is the case in tuna, the context of the word plays a critical role. This can be illustrated in the following construction:

Person A: What are we having for dinner tomorrow?

Person B: Tuna.

The word tuna in the conversation above is pointed out the pale yellow dot since the schwa is an utterance at the end of the word. However, if on the other hand the construction was like is the case below, it would imply that the teacher needs to point out the last syllable in the word *tuna* with a black dot. This is the case owing to the fact that the sound in *tuna* in this instance represents an open transition between the final consonant in tuna /n/ and the /z/ in the word.

Person A: Where is the dinner that you said we'll be having?

Person B: The tuna's in the fridge.

To put it differently, in the event a pause occurs after the word, the teacher points out the word final schwa as a pale yellow dot. This production is always the case either before a comma or at the end of a sentence. There nevertheless arises a need for the teacher to closely teach students knowledge regarding what makes up a pause. Within a sentence or a phrase, Messum and Young, (2017) contend that words have the tendency to group together. Significant to note is the fact that between such groups, there is something more or less like a pause that a learner or speaker usually creates – an attribute of the meaning of the words that they produce. This is illustrated in the sentence below:

We went/ to Spain/ during winter.

It is important to note that towards the final end of the above construction, the teacher points the schwa that appears at the final end of a word as a pale yellow dot as opposed to a black dot. This is illustrated in the construction below.

I prefer/ salmon/ to tuna.

Further illustrations of how the teacher points out the final syllable in the name *Monica* are given below. In the first two constructions, the teacher points this out using the pale yellow dot.

I handed it/ to Monica
Monica/ claimed/ she was slapped by Arthur.

The production above differs from the two constructions below in which he teacher points out the schwa with a black dot.

Monica should/ call him.
I hate/ Monica's/ new attitude.

From the above illustration what one takes note of are lexical items that are organized into units of meaning that exist above the level of the individual word (Messum & Young, 2017). The English language's function words usually attach to either to the end or alternatively to the end of words whereby the resulting grouping of words is referred to as a clitic group (Messum & Young, 2017). The notion of clitic here refers to the name that is given function words when they attach to other words in the mnner described above. When the schwa

appears as the final sound in a clitic group of words the teacher points to the pale yellow dot which in essence reflects the speaker's inner micro pause that they induce in speech before proceeding to produce the next unit of meaning.

It is possible for a student to attach two or even more function words to a lexical word for instance: *that you could ask* and *for a swim.* In such instances the teacher applies the same principle whereby they point to dots to indicate open transitions in the transcription below.

A favour/ that you could ask for: /. feɪvə ð.t ju k.d ɑːsk/

Good weather/ for a swim: /gʊd weðə f. r. swɪm/

In other instances, Messum and Young, (2017) note that the syllable that contains a schwa is pronounced with an open transition between consonants or alternatively, if the schwa starts with a clitic group, leading into the consonant. The second group of clitics in the two sentences below has an identical pronunciation indicating that from a production view point, a clitic is perceived as one word.

The sardines/ are fresh.

Do it/ afresh

In the two sentences above, both 'are fresh' and 'afresh' have the same pronunciation.
In the illustration of *He bought her chocolates,* the significance of difference that the ongoing analysis is apparent. Quoting Hirst, 2012, Messum and Young contend that if he bought the chocolates she had, the construction groups her with chocolates into a single lexical item – the teacher points this with a black dot. If on the other hand he bought the chocolates for her, then it means that her attaches to bought whereby the teacher points it out with a pale yellow dot which in essence indicates to the student that it appears at the end of the clitic group.

The teacher should not worry about the specific schwa that they need to point out. When they are confident that they are right to point to the black dot, they should use it on the chart. However, if the teacher experiences some degree of doubt, Messum and Young, (2017) point out that, it is alright to point to the yellow dot instead. More importantly is the fact that the teacher is not wrong for employing the black dot for all productions that are conventionally defined as a schwa.

The foregoing discussion has illustrated how students can point out two types of the schwa. The following illustrations will provide examples of how the teacher can point out opne transitions as black dots on the chart.

Phrase	Demonstration
to Italy	I --- t t l --- o • y
accordingly	or --- cc d ng l --- • i y
Together	e --- t g th

	--- • er
about	ou --- b t --- •
Project	e --- p r j c t --- •
Transportation	a a --- t r n s p t t n --- or •

Strong vowels

On the British Chart, the full vowels appear at the top of the chart and classified into four main rows. This are described from the top to the bottom of the chart as well as laterally from left to right. The top row of the chart according to Pronunciation Science (2017b)

contains the tense vowels that characterise the British English – that is the following vowels: /iː ɜː uː ɔː ɑː/. In given texts, these are referred to as long vowels. It is important to note that in given contexts, these vowels are only relatively long. Nevertheless, their description as free vowels is right owing to the fact that they can appear in syllables alongside a consonant or without a consonant sound like is the case in *see* and *feet*. As the illustration makes it clear, the vowels are free to appear in any position in a syllable (Pronunciation Science, 2017b). The notion of tense tends to be interpreted differently by phoneticians. However, one common characteristic that is notable in the production of strong vowels is that in their articulation, the student has to move the relevant part of their tongue to a position that falls in the opposite direction to the vocal tract wall (Pronunciation Science, 2017b). Among the resultant effects of such production is the fact that there is relatively small opening for air to pass through especially if the speaker is a child.

The second row comprises of the following sounds: /eɪ aʊ əʊ aɪ ɔɪ/. These are opening diphthongs which are vertically aligned on the chart in fig. 2 above with the rectangles whose colours are employed for their starting position that is ideally depicted at the top of each rectangle. The direction in which the speaker glides the sound in each case is illustrated by the lower colour including the pale blue of the schwu or the pale pink of the schwi. It is important to note that the colours in the uppermost part of the chart in fig. 2 above only approximate the starting positions of the diphthongs. The teacher should let students know that these are not exactly the same as the positions of any pure vowels. Moreover, for the same reason that a certain phonetic symbol is employed for different sounds, there is a need for the chart to be economical in relation to the number of colours whereby the resulting positions are indicative of the starting positions of the sound as opposed to the exact place where the sound is produced. The third row contains the sounds /ɪə eə ʊə/ which indicate

centring or closing diphthongs while the final row contains lax vowels /ɪ e æ ʊ ɒ ʌ/. From left to right the orientation changes to central, raised, and retracted.

References

Cherry, D. E. (2002). Experimenting with the Sound/Color Chart for Pronunciation. *Bulletin of Hokuriku University*, *26*, 219–235.

Messum, P., & Young, R. (2017). The Pronsci English Rectangle charts How to point words and phrases on the British and American English charts (Part 2: Using advanced features). Retrieved from https://sb54e2396517e46e6.jimcontent.com/download/version/1544438815/module/7707301562/name/Using%20advanced%20features.pdf

Pronunciation Science. (2017a). The PronSci Rectangle charts Layout diagrams: Annotated keys to the layout of the British and American English Rectangle charts Versions with phonemic symbols for classroom use. Retrieved from https://sb54e2396517e46e6.jimcontent.com/download/version/1544438815/module/7707301062/name/PS%20Rectangle%20charts%2C%20layout%20diagrams.pdf

Pronunciation Science. (2017b). The PronSci Rectangle charts Layout diagrams: Guide to the phonetics of the PronSci Rectangle charts for British and American English. Retrieved from https://sb54e2396517e46e6.jimcontent.com/download/version/1544438815/module/7707302062/name/Phonetic%20Guide%20to%20PronSci%20Rectangle%20charts%2C%20Dec%202017.pdf

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching*. Cambridge, MA: Cambridge University Press.