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# The Stigma of "Not Pot English" in Sri Lanka: A Study of Production of/o/ and / O / and Implications for Instructions 

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by

W.A. SUMUDU NISHAMANI WIJETUNGE

Under the Direction of John M. Murphy


#### Abstract

The inability to differentiate the English vowels / $\mathrm{o} /$ and / $\mathrm{o} /$ has become a stigmatized marker of a lower prestige and widespread dialect of Sri Lankan English. This lower prestige (LP) dialect is often referred to with the derogative phrase "Not pot English". This study aims to investigate the production of the vowel contrast by native Sinhala speakers of English. To this end, speech samples of three adult learners were analyzed. The findings of the study are discussed according to hypotheses of the Speech Learning Model, which suggests that the existent L1 specific phonetic categories hinder the formation of new L2 sound categories. Here, sounds that are similar, but not identical to L1 sounds are considered to be the most difficult to acquire. Also, the percentage of L1 use and the age of second language acquisition seem to have influenced the production of the vowels. Finally, in order to address this pronunciation issue, an instructional framework to teach pronunciation is proposed.


INDEX WORDS: English vowels, Stigmatized marker, Lower prestige dialect of Sri Lankan English, "Not pot English", Speech Learning Model

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by<br>\section*{W.A. SUMUDU NISHAMANI WIJETUNGE}

A Thesis Submitted in Partial Fulfillment of the Requirements of the Degree of

Master of Arts<br>College of Arts and Sciences<br>Georgia State University

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W.A. Sumudu Nishamani Wijetunge

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by

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May 2008

## DEDICATION

To my dear thatti for showing me that the impossible is actually possible...

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## CHAPTER 1

## INTRODUCTION

"Thus accent becomes a litmus test for exclusion, an excuse to turn away, to refuse to recognize the other" ${ }^{1}$

One's style of pronunciation can cause a range of reactions within a particular speech community. Such reactions may be either positive or negative based on the predominant views and values of the speakers of a particular language. Sometimes even a single phonological variation can provoke negative responses on the part of listeners. For example, Lippi-Green (1997) points out that the pronunciation of "ask" as "aks" by speakers of African American English results in stigmatization and discrimination. Similarly, pronunciation variations of certain phonological features have become a "negative class marker" in Sri Lankan English (Parakrama, 1995, p. 87). Sri Lankan English is a distinct variety spoken by Sri Lankans in all of their English speaking situations (see Gunesekera, 2005, for a discussion of Sri Lankan English). It is a language that has evolved over time, with the influence of Sinhala and Tamil, the two major native languages of the country. Today, we realize that the definition of native speaker model or standard varieties of English is shifting. Internationally, increasing attention is being given to the constructs of World Englishes and English as an International Language within the field of applied linguistics (Jenkins, 2000, Rajadurai, 2007). Some impacts of this shift are that the native speaker model is no longer considered the absolute norm and the concepts of Standards and non-standards are being redefined. In this context, the emergence of Sri Lankan English as a "national standard" has many positive aspects (Gunesekera 2005, p. 128). For example, Sri Lankan people have come to accept the existence of their own variety of English

[^0]and no longer look up to the British variety as the standard to which educated English speaker aspire (Gunesekera, 2005). Today, however, there are two distinct varieties of Sri Lankan English that are widely discussed by linguistic and applied linguistics specialists. The two varieties are: the High Prestige Dialect sometimes referred to as "Standard Sri Lankan English", and the Lower Prestige Dialect, often derogatorily referred to as "Not pot English" (Gunesekera, 2005, p. 113). Although the terms "standard" and "non-standard" are widely used to refer to these two varieties, for the purposes of this paper I have decided to use the more neutral terms High Prestige Dialect of Sri Lankan English (hereafter HPD Sri Lankan English or HPD Sri Lankan) and Lower Prestige Dialect of Sri Lankan English (hereafter LPD Sri Lankan English or LPD Sri Lankan) to refer to these two dialects. Such usage is more in line with long established conventions familiar to applied linguists internationally.

HPD Sri Lankan English is the "prestige English variety" spoken by the Sri Lankan elite (Gunesekera, 2005, p.34). The members of this social group have access to English from birth, and use English in their "educational, social and professional activities" (Gunesekera, 2005, p. 35). LPD Sri Lankan English, on the hand, is spoken by the majority of Sri Lankan English speakers who have no access or very limited access to English from birth and who rarely are required to use English in their daily activities .As noted above, the pronunciation variation of certain phonological features have become significant markers that determine one's social identity in the Sri Lankan context. It is somewhat ironic that the establishment of Sri Lankan English as a distinct language not as an inferior variant of British English has led to dichotomization of HPD Sri Lankan as superior and LPD Sri Lankan as inferior. In this context, the present study maps the tension between HPD Sri Lankan and LPD Sri Lankan by investigating the pronunciation of the English mid back vowel /o/ and the low mid back vowel
/o/ by Sinhala speakers of English. This vowel contrast has become one of the key determinants that distinguishes the HPD Sri Lankan (the most widely accepted variety) from LPD Sri Lankan or "Not pot English"".

## LPD Sri Lankan English ("Not pot English")

As noted above, "Not pot English" is the lower prestige variety of English spoken in Sri Lanka. Interestingly, the majority of Sri Lankans speak LPD Sri Lankan whereas only about 2\% of English speakers speak the HPD variety (Gunesekera, 2005). The term "Not pot" is used to refer to the confusion of the mid back vowel /o/ and the low back vowel $/ \mathrm{o} /$. This term is pronounced as /not/ /pot/ using the mid back vowel/o/ instead of the low back vowel/ / / , thereby signaling a pronunciation error prevalent among the LPD speakers of English (Gunesekera, 2005). According to Gunesekera (2005) the mixing of the two vowels is considered a "sign of 'godeyness' ' or backwardness" by speakers of HPD Sri Lankan English (p. 35). Ironically, HPD Sri Lankan English differs from LPD Sri Lankan English only in terms of phonology, i.e. pronunciation of certain sounds, while they share the same grammar and lexis. For example, the speakers of "Not pot English" confuse /o/ and / / / , either by substituting / $/ \mathrm{o}$ with $/ \mathrm{o} /$, or overusing /o/. As a result, these speakers of Sri Lankan English are not able to distinguish between 'hole and hall' or 'coal and call'. In addition, confusion of /p/ and /f/, insertion of lax front close vowel /I/before consonant clusters (Ex: /iskuul/for school), use of/f/for /s/ and use of /s/ for /z/, are other features that distinguish the lower prestige variety of Sri Lankan English from HPD (Gunesekera, 2005, p.126). It is apparent that there are only a few phonological differences between the two varieties. However, according to Gunesekera (2005) these phonetic variations

[^1]determine the social identity of the speakers. She further points out that speakers who produce these phonetic variations are considered to belong to the less prestigious social group who are less familiar with English, despite whatever might represent very high level of proficiency in grammar, lexis and other dimension of spoken fluency.

Considering the above-mentioned phonological differences between HPD and "Not pot English", it is apparent that mixing of the vowel contrast is not the only marker that distinguishes the HP variety from the LP variety. However, it is one of the significant phonological features that carries great social impact. For example Parakrama (1995) mentions that the mixing of the two vowels "stamps" or labels speakers as "having learnt English late and not generally using English in the personal domains of family, friendship and religion" (p. 85). Also, speakers of the lower prestige variety of English are contemptuously referred to as the "not-pot cases" by the members of the HPD speech community (Parakrama, 1995. p. 87, also Gunesekera, 2005, p. 35). Similarly, Gunesekera (2005) mentions that speakers of "Not pot English" are considered to be "trouble makers who represent a different culture" by the speakers of the HP variety (p. 37).

In addition, the inability to accurately produce the above-mentioned phonological features, including the vowel contrast, place learners at a disadvantage professionally and sometimes educationally. Gunesekera (2005) comments that,
"it is significant that most job opportunities above the level of clerk [sometimes inclusive of this position] require proficiency in English, in the private and the public sectors. The method of selection depends on an interview followed by a language test... One of the objectives of the interview is to find out if the applicant is fluent in English and if s/he speaks "Not pot English'. When interviewed for this study, many interviewers admitted that they actively seek this information because it helps them 'place' the candidates in their social class" (p.121)

Similar to the observation by Lippi-Green (1997), which shows that pronunciation sometimes becomes an excuse to refuse to recognize someone, it is apparent that variation in pronunciation has led to exclusion and non-recognition in Sri Lanka. It is apparent from Gunesekera's comment that the interview process is not only about hiring candidates who are proficient in English but also about hiring candidates who belong to a certain social class: the social class of High Prestige Dialect speakers. Gunesekera (2005) further comments that the few phonological differences between the HPD and "Not pot English" can make the "difference between being employed and unemployed because better jobs are still reserved for the privileged few who speak the prestige variety" (p. 126,)

Considering the social implications associated with the pronunciation of the vowel contrast, I think it is crucial to investigate the reasons behind the mixing or the confusion of the vowels. If the inability to accurately produce the vowels (i.e. distinguish between "coal and call") provokes negative personal evaluation, it places the majority of Sri Lankan English learners at risk professionally and educationally. Therefore, it is important for teachers and researchers to identify the reasons for the neutralization of the vowel contrast by Sri Lankan learners. Also, there is lack of research in the field of language and pronunciation teaching about the production of the vowel contrast /o/ and / $/$. Many scholars (Thiru Kandiah (1956), Doric de Souza (1969), Chitra Fernando (1976), Shiromi Fernando (1985), Arjuna Parakrama (1995), and Manique Gunasekara (2005)) have examined not only the distinct features of Sri Lankan English, but also language identity, resistance, and stigma associated with pronunciation among LPD speakers. However, there has been no research investigating the production of the specific vowel contrast in isolation in order to discuss the reasons for this production issue that is so prevalent among Sri Lankan learners.

## Objectives

For the above-mentioned reasons, the primary objective of this paper is to examine the production of the vowel contrast $/ \mathrm{o} /$ and $/ \mathrm{o} /$ by Sinhala speakers of English. ${ }^{4}$ As noted above, the inability to differentiate this vowel contrast places speakers of LPD Sri Lankan English at a disadvantage professionally, educationally, and socially. Consequently, it is important to investigate the learning process of the English vowels in order to explore the role of pronunciation instruction as a means of improving production. For this reason, the paper focuses on investigating;

- The mixing of /o/ and /o/by Sinhala native speakers of LPD Sri Lankan English in order to provide a theoretical basis for the inaccurate production
- The major factors that determine and govern the production of the vowel contrast
- The role of pronunciation instruction as a means of facilitating the acquisition process of the vowels

In order to achieve these objectives, the paper begins with a theoretical framework based on the hypotheses of the Speech Learning Model proposed by Flege (1992). The purpose of the framework is to shed light on the acquisition process in order to identify the reasons behind the difficulty in producing the two vowels accurately. This will be followed by a discussion of the existing literature that supports the hypotheses of the Speech Learning Model. These studies support the view that difficulty in producing the L2 vowel sounds stems from the difficulty in perceiving them accurately and that the existent L1 phonetic categories prevent the formation of the new L2 categories. Also, these studies examine various other factors, such as the amount of exposure to English, age of L2 acquisition and percentage of L1, that account for the production.

[^2]The paper then analyzes the speech production of three Sinhala speakers of English and discusses the findings according to the theories of the Speech Learning Model. Having identified the specific needs of the participants, the paper examines the role of pronunciation instruction as a means of modifying the vowel production. To this end, a curriculum design to enhance the perception and the production of the vowel contrast is proposed.

## Theoretical Framework - Speech Learning Model

The Speech Learning Model (SLM) developed by Flege and his colleagues accounts for how learners perceive and produce vowels and consonants in a second language (Flege, 1995). It is assumed by researchers that production and perception of vowels and consonants remain "adaptive over the life span" (Flege, 1995, p. 233). In this context, Flege (1995) mentions that learners' reorganize their phonetic systems by adding new phonetic categories and modifying the existing ones in order to accommodate new vowels and consonants in a second language. According to SLM, one of the main reasons why adult second language learners fail to produce L2 vowels and consonants accurately is because they fail to perceive the target sounds accurately. According to Flege (1995) the perception of sounds involves the "accurate appraisal of the properties" that differentiates the L2 sounds from one another and from sounds in L1. It also involves the "storing and structuring of this information in long-term memory" (p. 236). This failure to accurately discern the phonetic differences occurs because of the "assimilation" of phonetically distinct sounds into a single category, as L1 phonology filters out properties of L2 sound. (p. 238). In order to identify the theory behind the learning of L2 sounds and to identify the factors that cause the inaccurate production, it is vital to examine the predictions of the Speech Learning Model. The model provides a theoretical basis for the perception and the production of L2 sounds. Following is a brief description of the hypotheses of the SLM.

## The hypotheses of the SLM

1. Learners perceptually relate positional allophones in the L2 to the closest positionally defined allophone in the L1.
2. If the bilinguals are able to discern the phonetic differences between the target sounds and the L1 sounds, it is possible to establish a new phonetic category for the L 2 sounds.
3. When the perceived phonetic dissimilarity between an L2 sound and the closest L1 sound is greater, it is easier for the learners to discern the phonetic differences between the sounds. According to Flege (1992) there are several difficulty levels of producing L2 sounds.

- L2 sounds that are identical to L1 sounds may be produced accurately and authentically because it is possible to substitute the L2 sound with the existing L1 sound.
- L2 sounds that are similar to L1 sounds may also be produced accurately when the difference between the two sounds go unnoticed in L1-for-L2 substitution.
- L2 sounds that are substantially different from L1 sounds are also possible to master, at least when learners receive sufficient phonetic input. Although the L2 sound may be replaced at the beginning of the second language learning process, Flege (1992) hypothesizes that eventually learners cease to identify the target feature with sounds in the L1 inventory (p. 572).
- L2 sounds that are different enough from L1 sounds that "L1-for -L2 substitution is readily noticed", but are similar enough to prevent the formation of new phonetic categories are the most difficult to learn and produce (Flege, 1992, p. 566). Flege (1992) mentions that when auditorily distinct L2 sounds are persistently identified with those in L1 inventory, it is said to have been "equated" with the L1 sounds (p. 572).

4. The ability to discern the phonetic differences between the L1 and L2 sounds depends on the Age of Learning (AOL). The earlier L2 learning begins, the smaller the perceived phonetic distant needed to form new L2 categories.
5. When a new category formation for an L2 is blocked, a single phonetic category will be used to process L1 and L2 sounds. Eventually the two sounds will resemble one another in production.
6. The production of a sound eventually corresponds to the properties represented in its phonetic category representation.

In addition to the above hypotheses, the model predicts the effect of L2 learning on the production of vowel sounds. Flege (1991) showed that Spanish learners with less experience in English tend to identify English $/ \mathfrak{w} /$ as tokens of the Spanish /a/ category (Cited in Flege 1995, p. 243). According to SLM, at the beginning stages of second language learning, L2 sounds may be identified in terms of L1 sounds and categories. However, as the learners gain experience they are able to discern the phonetic differences between the target features and the native language features. At this point, it is possible to establish new sound categories independent of previously established L1 sounds (Flege, 1995, p. 263). In order to further illustrate these hypotheses, the following is a brief discussion of the existing literature on learning of L2 sounds.

## CHAPTER 2

## LITERATURE REVIEW

In an earlier research article, Flege (1992) provides more insights into speech learning in a second language. He suggests that accuracy and authenticity in second language sound production depend to a large extent on how L2 sounds are "categorized" (p. 566). Second language learners in the early stages of language learning attempt to identify L2 sounds within the already established L1 sound inventory. According to Flege (1992), this process takes place due to an inability to "modify the previously established L1 categories or to develop new categories" to accommodate the new and unfamiliar sounds (p. 567). Also, particularly at the early stages of language learning, L2 learners lack sufficient awareness of the sound system of the second language to identify the phonetic differences between the sounds in question. In this context, issues of language production arise when L2 sounds that are substantially different from any sound in L1 continue to be identified with the L1 inventory. This continual identification or "equation" is known as "equivalence classification" (Flege, 1992, p. 572). Evidence for the effect of equivalence classification is shown in a study by Flege et al. (1992). According to the findings of the study, Spanish subjects who were experienced and inexperienced in English identified Spanish /i/ and English /i/ to be the tokens of the same vowel category. Even for the experienced Spanish group, English/i/ did not emerge as a new vowel (Flege, 1992).

Further, Flege (1992) mentions that difference in production of L2 sounds can be traced to a difference in underlying perception (p.568). Citing a study by Ohala (1978), Flege shows that Hindi speakers of English have been reported to use Hindi retroflex stops rather than dental stops when producing the English phoneme /t/. Although the retroflex stops in Hindi are considered to be "marked" because of rarity, for Hindi learners the English stop /t/ is
perceptually more similar to Hindi retroflex stops. As a result, Flege suggests that perceptual similarity has become an important determinant in L1-for-L2 substitution patterns (Flege, 1992). Additionally, the speech learning difference between the early and late learners was also discussed. Flege (1992) proposes that late learners are more likely to perceptually equate L2 sounds with L1 sounds because of the establishment of the L1 inventory. Also, it seems that because of the mutual effects of L1 and L2, it is difficult for adult learners to maintain two language systems with native-like proficiency (Major, 1990, cited in Flege, 1992, p. 578). These findings imply that consistent with the predictions of the SLM, deviations in L2 sound production have a perceptual basis. Learners, particularly adults, identify L2 sounds as belonging to their L1 categories because of their well established L1 sound inventory.

In a study by Rochet (1995) two research questions of speech production were investigated. First, the study examined whether the perception or the production of second language sounds account for the development of a foreign accent. Next, Rochet examined the effect of auditory training on the perception and production of L2 sounds. Although speech production had been the main focus of many language practitioners, the possibilities of the effects of perception have received serious consideration (Rochet 1995). Rochet also believes that inaccurate perception may result in inaccurate production of sound contrasts that are not existent in L1. This is proven by the fact that different L1 speakers produce different sounds for the same sound contrast in the second language (Rochet, 1995). In order to investigate this element of language transfer, Rochet's study aimed to determine the reasons for the accented pronunciation of the French vowel /y/ by native speakers of Canadian English and Brasilian Portuguese. The native languages of these two groups contain only the two high vowels /i/ and $/ u /$, not the French vowel $/ \mathrm{y} /$.

In the vowel production task, both participant groups reproduced the French vowel /y/ accurately in $51-52 \%$ of the words. Nonetheless, the two groups produced different vowels when they were not successful in producing the French /y/. For example, the English group repeated the French $/ \mathrm{y} /$ as $/ \mathrm{u} /$ or an $[\mathrm{u}]$-like vowel whereas the Portuguese learners repeated it as $/ \mathrm{i} /$ or [i]like vowel. In the perceptual task, Rochet found that the French vowel /y/was identified to be /u/ by English speakers whereas it was identified to be /i/ by the Portuguese speakers. Rochet's study revealed important information about perception and production of second language speech sounds. Both imitation and the perceptual tasks demonstrated that learners, at least in the early stages of language learning, tend to perceive L2 sounds in terms of L1 phonology (Rochet, 1995). In this regard, they may classify L2 sounds as "acoustically different realizations of the same L1 category" (p. 385). Further, Rochet (1995) points out that once an L2 sound is assigned to an L1 category, it is produced according to the phonetic realization rules of the first language.

This information about the perception of speech sounds led Rochet to examine the benefit of perceptual training. According to the findings of the study, it is evident that learners need to identify and label the target sounds accurately in order to produce them accurately. Therefore, the purpose of Rochet's experiment was to determine whether perceptual training in the form of structured identification tasks can have an impact on perception and production of voicing contrast in the stop consonants of French by native speakers of Mandarin Chinese. The results of the study showed that perceptual training improved perception performance, which was accompanied by improved production performance (Rochet 1995). The findings of Rochet's study support the hypotheses of the SLM. As predicted by the model, the participants' inaccurate pronunciation of the French $/ \mathrm{y} /$ has a perceptual basis. Portuguese speakers perceived $/ \mathrm{y} /$ to fall within Portuguese /i/ whereas English speakers perceived it to fall within English/u/. This
process, as noted earlier, is referred to as "equivalent classification" (Flege 1988, cited in Rochet 1995, p. 385). In addition, the results support the view that learners' perception of the L2 sounds increases when provided with necessary training.

In a study by Flege, Bohn, \& Jang (1997) the role of English-language experience on adult learners' production of L2 vowels was investigated. It is believed that most individuals who started learning a second language in adulthood will retain a foreign accent. According to Flege, et al. (1997), a foreign accent stems partly from the inaccurate production of L2 consonants and vowels (p 437-428). Although researchers question the ability of adult learners (those who started learning the second language after a critical period) to learn to produce L2 sounds accurately, some researchers believe that it is possible, at least to some extent, for adult learners to do so (Best \& Strange, 1992). In fact, some researchers (Flege 1981, Ioup, 1995) propose that ability to learn new forms of speech remains intact over the entire life span, though it is limited by perceptual factors. Further, Flege et al. (1997) believe that it is possible for adult learners to produce certain L2 vowels with native-like proficiency given "sufficient native speaker input and the absence of perceptually-based limitation" (p. 438). In this regard, the focus of their study was to investigate whether the experienced non-native subjects produced the English vowels /ı/, /i/, / $\varepsilon /$, and /æ/more accurately than the inexperienced subjects. Also, the relation between vowel production and perception accuracy was investigated.

The participants in the study were native speakers of German, Spanish, Mandarin, and Korean. Participants in each group were assigned to "experienced" or "inexperienced" subgroups based on length of residence in the U.S. Because the vowel system of each of these languages differs from English in unique ways, it gave the researchers the opportunity to identify the crosslanguage phonetic interference better. The study provided evidence for the hypothesis that
experience in second language learning enables adult learners to produce certain vowels more accurately. For example, the experienced groups' production of the vowel /I/ was more nativelike than the inexperienced group for each language, despite the fact that/I/ does not exist in Spanish, Mandarin, and Korean. Nonetheless, such a significant effect was not found for the production of other three vowels, $/ \mathrm{i} /, / \varepsilon /$, and $/ æ /$. Flege et al.(1997) also found that the performance of the experienced group was not "completely native-like" although better than the inexperienced group (p. 467). The results of the study also suggest that the nature of the L1 vowel inventory and its perceived relation to L2 vowels influence the extent to which L2 vowel production and perception improve as non-native learners gain English experience. For example, the German inexperienced speakers produced and perceived the distinction between English $/ \varepsilon /-$ $/ \mathfrak{\not a} /$ less successfully than the inexperienced Spanish speakers. Flege et al. (1997) believe that the German participants may have identified $/ \varepsilon /$ and $/ æ /$ as instances of a single L1 vowel (German $/ \varepsilon /$ or / $\varepsilon: /$ ), whereas Spanish speakers identified the same vowels as instances of two different L1 vowels. Therefore the results of the study support the hypothesis that non-native speakers' accuracy in producing English vowels is based on their perception of L2 vowels. Also, Flege et al. concluded that the degree of accuracy in producing and perceiving English vowels, as well as the extent to which their performance improved with experience in English, varied as a function of L1 background. This was likely due to cross-language differences in the perceived relation between vowels found in the L1 and English.

In a similar study, Flege \& MacKay (2004) examined the perception of English vowels by native speakers of Italian. Because standard Italian has fewer vowel contrasts than English, the researchers believed it would help them to form a better understanding of the learners' perception and production of English vowels (Flege \& MacKay, 2004). For example, if native
speakers of Italian are not able to form new categories for English vowels, they can be expected to have difficulty in discriminating vowel contrasts in English. Such a difficulty is an indication of inaccurate perception of the L2 vowels. Flege and MacKay (2004) examined the perception of $/ \mathrm{i} /$, /I/, /eェ/, / $\varepsilon /$, /æ/, / $\Lambda /$, and /ər/ by the participants of the study.

In the preliminary experiments, the researchers examined the perception of the target English vowels (/i/, /I/, /eェ/, /દ/, $/ \mathfrak{\not} /, / \Lambda /$, and $/ ə r /$ ) and the perceived relation between the Italian vowels and the English target vowels. According to the findings, the Italian university students who had lived in Canada for three months demonstrated difficulty discriminating $/ \alpha /-/ \Lambda /$, $/ \varepsilon /-/ \mathfrak{w} /$ and /i/-/I/ because they identified both members of the each category as instances of one Italian vowel. The results of the two experiments were consistent with the predictions generated by the SLM model. Upon further examination of the perception of the target English vowels, the researchers found that the participants discriminated the $/ \mathrm{e} \pm /-/ \varepsilon /$ contrast more accurately than expected. Such divergences, led the researchers to further examine learner performance and to conclude that non-native discrimination of L2 vowels may depend on more than "cross-language patterns of perceptual assimilation" (Flege \& MacKay, 2004, p. 13). Other factors that influence the discrimination of L2 vowels were investigated in the secondary experiments.

In subsequent experiments, the researchers examined the perception of the English vowel contrasts by native Italian speakers who were long-time residents in Canada. The participants were grouped according to age of arrival (early and late arrivers) and percentage of first language use (high vs low). According to the findings, Flege and MacKay found that in both experiments, early learners scored higher than the late learners. Similarly, in the early group, low L1 use participants showed higher scores than high L2 use participants. The researchers therefore concluded that the establishment of the L1 specific sound system does not hinder learners from
perceiving L2 sounds accurately. They also believe that number of years of education in L2, L2 input from native speakers of English, and motivation are determining factors for the accurate perception of English vowels by early learners. Explaining the lower scores by the high L1 use participants, Flege and MacKay (2004) point out that there is strong L1 activation in these participants, which has a powerful influence on their representation of L1 vowels. Consistent with the predictions of the SLM model, the authors concluded that the establishment of the L1 vowel system does not by itself prevent the formation of L2 specific new vowel categories. The percentage of L1 use, age of second language learning, and the amount of L2 input also determine the accurate perception of L2 vowel sounds.

In another study, Iverson and Evans (2007) tested Spanish, French, German, and Norwegian participants in order to examine the different cues used by different L1 speakers when listening to English vowels. They investigated the extent to which the representation of target formant frequencies, formant movement, and duration are able to predict the ability of L2 learners to recognize natural English vowels, whether the representation of these cues varies according to the L1 and whether the representations are due to category assimilation. In order to assess L1 assimilation the subjects were instructed to listen to the English vowels /i/, /I/, $/ \varepsilon /, / \partial /, \nprec /, \alpha /$ in the $/ \mathrm{b} /-\mathrm{V}-/ \mathrm{t} /$ context and identify which of their L1words (L1 vowels) sounded most similar or closest to the words they heard. In this context, the researchers found that both Spanish and French listeners assimilated multiple English vowels to the same L1 category (p. 2850). For example Spanish listeners have identified the English vowels /a/, /aı/, /au/, and /a/ as related to Spanish /a/ with varying degrees of assimilation. On the other hand the researchers found that the German and the Norwegian speakers assimilated most English vowels to a unique L1 vowel. Theoretically, it is therefore, easy for German and Norwegian learners to learn new
vowel categories because they can make use of the existing L1 categories. On the contrary, it is less easy for the Spanish and French learners because accurate learning of the English vowels requires the formation of new vowel categories that are non-existent in their vowel inventory.

Interestingly, Iverson and Evans also found that the participants did not simply use their existing L1 categories when listening to English vowels. In terms of learning, Spanish speakers were the most successful in learning the English vowel system. French speakers also appeared to have learned new English vowels. Although the Germans did not seem to form new categories they also showed progress in learning new English vowels. Norwegians also showed L1 assimilation for diphthongs.

The researchers found that there were clear differences among the participant groups in identifying the English vowels. Such differences are a clear indication of the effect of L1 in listening to English vowels. However, they found only limited evidence that the groups differed fundamentally in their perception of English vowels. Despite the different assimilation patterns, all groups of participants demonstrated learning; therefore, the amount of assimilation was proven to be a weak predictor of learning. However, it may be that assimilation is a stronger predictor of production than of learning, so it is not reasonable to discard the predictions of the SLM model. The authors concluded that assimilation may be able to explain some of the issues associated with language learning problems; however, assimilation alone cannot fully explain the difficulties L2 learners encounter when faced with new sounds.

In a study, Frieda and Nozawa (2007) examined the role of linguistic experience in perceiving foreign vowels. According to Flege's SLM, several factors such as age of L2 learning, length of residence (LOR) in the L2 speaking country, daily use of native language and perceived relation between L1 and L2 contribute to the learning of L2 sounds (Frieda \& Nozawa,
2007). Most importantly, the SLM predicts that the formation of new categories for the L2 sounds depend on the learner's ability to discern the phonetic difference between the L1 sound and the comparable L2 sound (Frieda \& Nozawa, 2007). As a result, this study investigated two research questions: how the perceived similarity or difference between the L1 sounds and the L2 sounds affect sound discrimination and how the accurate perception of the sounds depends on L2 experience. Here, the researchers define L2 experience as "residing in an English speaking country for an extensive period of time" (p. 80).

The participants of the study were two groups of native Japanese speakers and one group of native Korean speakers. The two Japanese groups differed from length of residence. The experienced group reported having resided in the U.S. for an average of 7.5 years whereas the inexperienced group had lived in an English speaking country not more than six months. The Korean group reported a mean LOR of 3.5 years. In the first experiment, the participants were
 $/ \Lambda /$, /ov/-/u/, /ov/-/av/, /a/-/v/, /a/-/ $\Lambda /$ and /a/-/ov/ in a $/ \mathrm{bV} /$ context. They were instructed to identify L1 vowels that were most similar to the English vowels. In the second experiment, which was a Categorical Discrimination Test, the participants were presented the same vowel contrasts in a $/ \mathrm{bVt} /$ context for judgment. Here, in addition to the non-native participant groups, a control group of native speakers of American English participated in the experiment. The subjects heard three stimuli and were instructed to choose one stimulus that consisted of categorically different vowel from the other two.

In the first experiment, the Korean group identified English vowels /i/ and /I/ as belonging to the Korean $/ \mathrm{i} /$ category. Similarly, the English vowels $/ \varepsilon /$ and $/ æ /$ were equated with the Korean vowels $/ \varepsilon /$ and $/ \mathrm{e} /$ and the English vowels $/ v /$ and $/ \mathrm{u} /$ were assimilated to the Korean
vowel $/ \mathrm{u} /$. Therefore, the researchers suggested that the English vowels that were either assimilated or equated with the Korean vowels will receive less discrimination in production. The experienced Japanese group assimilated the English vowel/I/ with Japanese /i:/ whereas the inexperienced group assimilated it to the Japanese vowel/e/. Also, both groups assimilated the English vowels /æ/ and $/ \Lambda /$ to Japanese $/ \mathrm{a}: /$ and equated the English vowels $/ \mathrm{v} / \mathrm{and} / \mathrm{u} /$ with Japanese $/ \mathrm{u} /$. Consequently, the researchers proposed that the English vowels that were either assimilated or equated with the Japanese vowels will have less discrimination in production.

Consistent with the predictions of the first experiment, the native Korean group obtained lower scores for the vowel contrasts $/ \mathrm{i} /-/ \pm /, / \varepsilon /-/ æ /$, and $/ \mathrm{u} /-/ \mathrm{u} /$ in the second experiment. The two Japanese groups obtained lower scores for discriminating $/ I / / / \varepsilon /$. However, only the inexperienced Japanese group showed difficulty in $/ æ / / / \alpha /$ contrast. The inexperienced Japanese group showed lower scores for the $/ \varepsilon / / / e /$ contrast than the other experienced Japanese group, the Korean group and the English group. The inexperienced group also scored lower than the English group for the $/ æ /-/ \mathrm{aI} /$ contrast and the $/ \mathrm{v} /-/ \mathrm{u} /$ contrast. Both the experienced and the inexperienced Japanese groups showed less discrimination sensitivity than the native English group for the $/ \alpha /-/ \Lambda /$ contrast.

Considering the findings of the study, the researchers concluded that the inexperienced Japanese group performed more poorly than the experienced group for most of the vowel contrasts. In fact, this group showed the least sensitivity in discriminating the vowels contrasts followed by the Korean group. Therefore, Frieda and Nozawa (2007) concluded that although experience alone cannot account for the difference of results between the two Japanese groups, increase of experience with L2 affects the learners' perception of L2 sounds.

In sum, the discussion of the existent literature on the learning of L2 sounds illustrate that second language learners, at least at the beginning stages of their language learning experience, tend to perceive L2 sounds in terms of their L1 phonology. In studies by Flege (1992), Rochet (1995), Flege \& MacKay (2004), Iverson \& Evans (2007), and it was discovered that production difficulty of certain L2 sounds takes place due to learners' inability to perceive the phonetic differences between L1 sounds and corresponding L2 sounds. As a result, L2 sounds are assigned to an existing L1 category and are produced accordingly. Further, Flege (1992) explained that this takes place due to learners' lack of sufficient knowledge of the sounds system of L2. In addition, studies by Flege, Bohn \& Jang (1997) and Freda \& Nozawa (2007) examined the effect of L2 experience on the perception and the production of sounds. These studies found a positive relation between second language experience and accurate pronunciation of the L2 sounds. As language learners gain more experience in a second language, they become increasingly aware of the target language sound system and thus become more aware of the phonetic differences between the sounds. Such awareness results in the formation of new phonetic categories. Further, Flege \& MacKay (2004) discovered that age of L2 acquisition, age of arrival in the L2 speaking country and percentage of L1 use also affect the formation of new L2 specific phonetic categories. Therefore, it is apparent that the findings of the abovementioned studies support the predictions of the SLM.

## CHAPTER 3

## METHOD

## Participants

All three participants in this study were doctoral students in the department of Physics at Georgia State University. They are Sri Lankan learners of English between the ages of 27-35. The native language of these participants is Sinhala, the language spoken by the Sinhalese who represent the main ethnic group in Sri Lanka. The following background information is based on the details provided by the participants in the Background information questionnaire given during data collection (See data collection). As mentioned in the questionnaire, the participants all started learning English as a second language at age of 11 or 12, and have been studying it formally for an average of 12 years (range $=8-20$ years). Two participants had been studying at Georgia State University for four years by the time of testing and one had recently arrived in the United States.

The three native speaker Sinhala participants of the study have learned most of their English in formal classroom settings. None of them indicated learning English in informal situations (i.e. by interacting with friends, family or colleagues). However, two of the participants mentioned that in the U.S. they speak English daily approximately $40 \%-60 \%$ of the time as opposed to their native language. One participant indicated only $20 \%-40 \%$ of daily English usage. All three participants rated their ability to read, write, listen and speak in English as either "good" or "fair" on a scale from "Excellent to Fair". Similarly, all three self-rated their levels of pronunciation as "fair" on a scale from "Excellent to Fair". The participants mentioned in the questionnaire that miscommunication frequently takes place in their interactions due to lack of accurate pronunciation. Responding to a question about pronunciation instruction, only
one out of the three mentioned having received instruction in pronunciation in his English learning experience. Additionally, one participant mentioned that his biggest pronunciation difficulty lies in a tendency to mispronounce longer English words like "Massachusetts". The other two participants indicated that they cannot specify what their pronunciation issues might be.

## Data collection

When diagnosing learners' production of the sounds of a second language, Celce-Murcia, Brinton \& Goodwin (1996) assert that it is best to obtain two types of spoken production samples: "a standard sample of the learner reading aloud and a sample of the learners' free speech" (p. 345). By obtaining a reading aloud production sample, the researcher can more easily assess the participants' command of pronunciation features that are difficult to assess in a natural speech context. Also, such a speech production task is more indicative of the participants' explicit knowledge of the target features in the second language. On the other hand, a free speech sample provides "the most natural evidence of a speaker's pronunciation" (Celce-Murcia et al., 1996, p. 346). Therefore, it is evident that both types of spoken production tasks facilitate assessment of the participants' production of the sound features of a second language.

As a result, the primary data for the present study was collected through three different instruments: audio recordings of informants reading aloud an extended prose selection, audio recordings of informants reading aloud a series of specially designed individual sentences, and a free speech sample. The primary objective of data collection was to investigate whether the participants produce any phonological variations that are considered pronunciation errors in HPD Sri Lankan English and to specifically identify them. In order to achieve this objective, the participants were first requested to read aloud a diagnostic passage from Celce-Murcia et al
(1996) (see appendix A). As Celce-Murcia et al suggest participants were given the opportunity to listen to an audio recording of a native speaker reading the diagnostic passage. They were also given time to read, clarify any ambiguities in pronouncing words or phrases, and practice the passage before the recording begins. The main objectives of these initial steps were to prevent any "unnatural flows, awkward pauses or stumbling over words, and restarts" (Celce-Murcia et al., 1996, p. 345). Also, they were intended to make the participants more comfortable and familiar with the content of the reading passage.

Having recorded the reading passage, the participants were requested to read five English sentences that contained specific words requiring the production of vowels $/ \mathrm{o} / \mathrm{and} / \mathrm{\rho} /$, the phonemes $/ \mathrm{p} /$ and $/ \mathrm{f} /, / \mathrm{s} /$ and $/ \mathrm{S} /$ and consonant clusters (see Appendix A). As discussed in the introduction, these specific phonological features are particular characteristics of "Not pot English". Finally, free speech samples were elicited from the participants. They were asked to choose a topic from a list of topics suggested by the researcher and to talk about the selected topic for 1-3 minutes (see Appendix A). The participants were given time to practice their free speech sample before the audio recording. Eventually, all of the speech samples gathered from the three participants were transcribed using the International Phonetic Alphabet (IPA). Following these phases of data collection, participants were given a background questionnaire (see Appendix B) in which they were requested to provide information about their native language, length of residence in the United States, English language proficiency and pronunciation.

## Data analysis

Having obtained the audio recordings of the diagnostic passage, the five sentences and the free speech samples, I listened to them repeatedly in order to find out whether the participants produced phonological features that are considered errors in HPD Sri Lankan English. As mentioned above, each audio recording had been transcribed using the IPA. After examining the phonetic transcriptions, it was discovered that out of the distinct phonological features of "Not pot English", the participants demonstrated difficulty in differentiating the English mid-back vowel/o/ and the low-back vowel /o/. Consequently, the focus of study was narrowed down to the investigation of the production of the mid-back vowel/o/ and the lowback vowel/o/ by Sinhala speakers of English.

Next, the learners' production of $/ \mathrm{o} /$ and $/ \mathrm{o} /$ in all of the instances in the diagnostic passage, the five sentences, and free speech samples was calculated and listed separately. In an effort to introduce an acceptable level of intercoder reliability to the study, a native speaker of English also listened to the three audio recordings of the participants and transcribed them using IPA conventions. Specifically, she examined the production of the vowel contrast and indicated whether she heard the participants producing the mid-back vowel/o/ or the low-back vowel / $\mathrm{o} /$, in all of the instances that require the production of the sound $/ \mathrm{o} /$. The findings of the two raters were compared to calculate the total number of instances they agreed on for each participant (see Appendix C). Following that the raters' agreement or disagreement on the production of the lowback vowel / $/$ and the mid-back vowel /o/ in each participants' speech samples (the diagnostic passage, sentences, and free speech sample) were calculated.

The following table demonstrates all the instances in the audio recordings of the participants that the two raters agreed and disagreed on.

Table 1: Two raters' agreement on the production of the English vowels /o/ and /o/


119* - Total number of low-back vowels in the three instrument for the 3 participants 50**- Total number of mid -back vowels in the three instruments for the 3 participants

As table 1 indicates, there were 24 instances that require the production of low-back vowel in a single diagnostic passage. As a result, there were a total number of 72 instances ( 24 x $3=72$ ) of the low-back vowel production by the three participants. Here, the two raters agreed on 53 instances out of 72 productions of the low-back vowel. In the diagnostic passage, there were a total number of 13 instances that require the production of the mid-back vowel/ $/ \mathrm{o} /$ and thus a total number of 39 productions $(13 \times 3=39)$ by the three participants. The two raters showed agreement on 37 instances out of 39 for the production of mid back vowel/o/ in the diagnostic passage. In the five sentences, there were a total number of 9 instances that require the production of the low-back vowel $/ \mathrm{\rho} /$, and a total number of 2 instances that require the production of the mid-back vowel $/ \mathrm{o} /$. As a result, the three participants produced a total number
of 27 low-back vowel instances and a total of 6 mid-back vowel instances. In this context, the two raters agreed on 21 instances out of 27 that require the production of $/ 0 /$, and 6 instances out of 6 that require the production of $/ \mathrm{o} /$.

In the free speech samples, there were a total number of 20 instances ( 10 by participant 1 , 5 by participant 2 , and 5 by participant 3 ) of the low-back vowel $/ \mathrm{o} /$ productions by the 3 participants. The two raters agreed on 12 instances out of 20 . On the other hand, there were a total number of 5 instances that require the production of the mid back vowel $/ \mathrm{o} /$, and the two raters agreed on all 5 instances. As a result, there were a total number of 119 instances that require the production of the low-back vowel $/ \mathrm{o} /$, and 50 instances that require the production of the mid-back vowel/o/ in all three instruments. The two raters showed agreement on 86 instances out of 119 for an intercoder reliability of $72 \%$, and 48 instances out of 50 for an intercoder reliability of $92 \%$. Finally, out of the total of 169 instances that require the production of both the low-back vowel $/ \mathrm{o} /$ and the mid-back vowel $/ \mathrm{o} /$, the two raters agreed on 134 instances, thus demonstrating a total agreement of $79 \%$. Consequently, the 134 instances the two raters agreed on were further examined in order to identify the production patterns of the two English vowels by the participants.

## CHAPTER 4

## RESULTS

Upon close examination and analysis of the speech samples, it was apparent that the participants did not make errors in pronouncing the phonemes $/ \mathrm{p} /$ and $/ \mathrm{f} / \mathrm{/} / \mathrm{s} /$ and $/ \mathrm{s} /$ and the consonants clusters. They did not seem to mix $/ \mathrm{p} /$ and $/ \mathrm{f} / \mathrm{g} / \mathrm{s} /$ and $/ \mathrm{s} / \mathrm{or} / \mathrm{s} / \mathrm{and} / \mathrm{z} /$ and did not seem to have much trouble with the insertion of the high front lax vowel/I/before consonant clusters. As noted earlier, these are characteristics of LPD Sri Lankan English. Nonetheless, they demonstrated difficulty in differentiating the English low-back vowel / $/$ / and mid-back vowel /o/, which is one of the key determinants that differentiate the HPD Sri Lankan English from "Not pot English"

After analyzing the production of target English vowel contrast $/ \mathrm{o} /$ and $/ \mathrm{o} /$, both raters agreed that the participants were not able to distinguish words like "boat" and "bought" and "coat" and "caught". Table 2 below indicates the total accurate production of the vowels /o/ and $/ 0 /$ by each participant in the diagnostic passage, five English sentences and the free speech samples. Participant 1 produced the low-back vowel/ $/$ /accurately only in one instance out of 20 in the diagnostic passage. Similarly he accurately produced /o/only in 2 instances out of 8 in the sentences. He did not accurately produce any of the words that required the pronunciation of the low-back vowel /o/ in the free speech sample. In total, participant 1 produced the low-back vowel $/ 0 /$ accurately only in three instances out of 34 . Nonetheless, he produced the mid-back vowel / $/$ / in all of the instances accurately and indicates an accurate production of $100 \%$.

Participant 2 recorded the highest number of accurate production of the low-back vowel $/ 0 /(23 \%)$. He produced the English low-back vowel accurately in 3 instances out of 15 in the diagnostic passage and 3 instances out of 7 in the sentences. However, he did not produce /o/
accurately in any of the instances in the free speech sample. On the other hand, participant 3 reported the lowest number of accurate production of the low-back vowel / $\mathrm{o} /$ in the audio recordings. He produced / $/$ / accurately only in 2 instances out of a total number of 26 instances in the diagnostic passage, sentences and the free speech sample. Similar to the production pattern of participant 1 and 2, participant 3 also did not produce the low-back vowel/ $/ \mathrm{s} /$ in any of the instances in his free speech sample.

Table 2: Total accurate production of the target English words by the Sinhala native speakers

|  |  | Participant 1 |  |  | Participant 2 |  |  | Participant 3 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | จ゚ |
| Passage | $\begin{aligned} & \text { /o/ } \\ & \text { /o/ } \end{aligned}$ |  | 113 | $\begin{gathered} 5 \% \\ 100 \% \end{gathered}$ | 1512 | $\begin{gathered} 3 \\ 12 \end{gathered}$ | $\begin{gathered} 20 \% \\ 100 \% \end{gathered}$ | 1812 | $\begin{gathered} 1 \\ 12 \end{gathered}$ | $\begin{gathered} 6 \% \\ 100 \% \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  |  |
| Sentences | $\begin{aligned} & \text { /o/ } \\ & \text { /o/ } \end{aligned}$ | 82 | 22 | $\begin{gathered} 25 \% \\ 100 \% \end{gathered}$ | 72 | 32 | $\begin{gathered} 43 \% \\ 100 \% \end{gathered}$ | 62 | 12 | $\begin{gathered} 17 \% \\ 100 \% \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  |  |
| Free Speech | $\begin{aligned} & \text { /o/ } \\ & \text { /o/ } \end{aligned}$ | 62 | 0 | $\begin{gathered} 0 \% \\ 100 \% \end{gathered}$ | 4 | 01 | $\begin{gathered} 0 \% \\ 100 \% \end{gathered}$ | 22 | 0 | $\begin{gathered} 0 \% \\ 100 \% \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  |  |
| Total | /o/ | 3417 |  | $\begin{gathered} 9 \% \\ 100 \% \end{gathered}$ | 2615 | $\begin{array}{cc}26 & 6 \\ 5 & 15\end{array}$ | $\begin{gathered} 23 \% \\ 100 \% \end{gathered}$ | 2616 | $\begin{array}{cc}6 & 2 \\ 6 & 16\end{array}$ | $\begin{gathered} 8 \% \\ 100 \% \end{gathered}$ |
|  | /o/ |  |  |  |  |  |  |  |  |  |

In sum, participant 1, 2, and 3, reported an accurate production of the low-back vowel $/ \mathrm{o} / 9 \%, 23 \%$ and $8 \%$ respectively. All three participants did not produce the low-back vowel $/ \mathrm{s} /$ accurately in any of the instances in their free speech samples. In addition, they all reported $100 \%$ accuracy in producing the mid-back vowel $/ \mathrm{o} / \mathrm{in}$ all of the instances in the diagnostic passage, the sentences and the free speech samples.

The following chart indicates the percentage of the accurate production of the low-back vowel/o/ by the participants in the three instruments.


Figure 1: Percentage of accurate production of the mid-back vowel /o/ and the low-back vowel /o/ by the three participants

It is apparent from the above table and the chart that the participants reported a low percentage of accuracy in producing the low-back vowel/o/ (less than $25 \%$ ) in all of the instances in the three instruments. As noted above, they showed an accuracy of $100 \%$ in producing the mid-back vowel/o/in all of the instances in the three instruments. As a result, the transcripts of the two raters were further examined to identify the actual vowel produced by the participants, in all of the instances they failed to produce the low-back vowel $/ \mathrm{s} /$. Consequently, it was found that the three participants substituted the low-back vowel $/ \mathrm{s} /$ with the mid-back vowel /o/ except in one instance.

The following table indicates the actual vowel produced by the participants in lieu of the lowback vowel $/ \mathrm{o} /$.

Table 3: The actual vowels produced by the participants in lieu of the low-back vowel /a/

| Participant | Total number of inaccurate productions of the low-back vowel /o/ | Actual vowel produced |  | \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | /0/ | /2/ | /o/ | /2/ |
| Participant 1 | 31 | 30 | 1 | 97\% | 3\% |
| Participant 2 | 20 | 20 | 0 | 100\% | 0\% |
| Participant 3 | 24 | 24 | 0 | 100\% | 0\% |
| Mean score | 24.6 | 24.3 | 0.3 | 99\% | 1\% |

Table 3 indicates that all three participants substituted the low-back vowel/o/ with the mid-back vowel /o/ in all of the instances where they failed to produce the English / $/$ /. Participant 1, however, produced the schwa (/2/) in one instance out of 31 , in place of the lowback vowel $/ \mathrm{o} /$. He replaced the $/ \mathrm{s} /$ with a schwa in pronouncing a word in the diagnostic passage (see Appendix C for the actual vowels produced by the participants in the three instruments). Upon examination of these findings, it is apparent that the three Sinhala native speakers of the study demonstrate difficulty in differentiating the vowel contrast in production. In fact, they substituted the low-back vowel with the mid-back vowel in $99 \%$ instances they failed to produce /0/

## CHAPTER 5

## DISCUSSION

As noted in the results, the three Sinhala native speakers of English produced the midback vowel /o/ accurately ( $100 \%$ accuracy) in all of the instances that required the production of vowel /o/. However, they did not produce the low-back vowel $/ 0 /$ in about $77 \%$ of the instances that required the production of $/ \mathrm{o} /$. Instead, they mistakenly substituted the mid-back vowel for the low-back vowel. In addition, it was found that the three participants substituted the mid-back vowel for the low-back vowel in all of the instances in their free speech samples that required the production of $/ \mathrm{o} /$.

A discussion of the difficulty in producing the low-back vowel /o/ by the three native speakers of Sinhala can be drawn from the predictions of the SLM. As discussed earlier in the literature review, the SLM proposes that adult learners may produce L2 sounds inaccurately because they fail to perceive them correctly. They are hearing them through the filter of their first language (L1) phonological system. Accurate perception of L2 sounds involves accurate discerning of the phonetic differences between the L1 sounds and the L2 sounds. When learners fail to do so, they then tend to identify the L2 sounds as belonging to existent L1 phonetic categories (see literature review for a detailed discussion). This difficulty increases when learners encounter an L2 sound that is similar to a corresponding L1 sound, but is not identical to it (Flege, 1992).

In the Sinhala phonological system (see Appendix C for the Sinhala vowel chart), there is a mid-back vowel / $\mathrm{o} /$ but there is no low-back vowel. The two contrasting vowels $/ \mathrm{o} / \mathrm{and} / \mathrm{o} /$ in English may be phonetically similar (e.g., both are back vowels) but they are not identical to the single vowel category /o/ in Sinhala. The low-back vowel/o/, which is an unfamiliar and unusual
sound for the Sinhala speakers, differs from the mid-back vowel/o/ primarily in place of articulation and degree of lip rounding. Therefore, it is reasonable to assume that once the phonetic category of mid-back vowel/o/ has been established, it is rather difficult for these participants to perceive $/ \mathrm{o} /$ and $/ \mathrm{o} /$ as two distinct sounds. Also, it seems that the similarity between the English low-back vowel / $/$ / and the Sinhala mid-back vowel/o/ has prevented the formation of a new phonetic category for the English vowel. As a result, the participants of the present study seem to perceive the two English vowels to be instances of Sinhala/o/. In the SLM, Flege (2004) also proposes that L1 phonetic categories developed through childhood into adolescence are more powerful attractors of L2 speech sounds. Therefore, these participants, who all began learning English at the beginning of adolescence, are more likely to perceive the target vowel sounds belonging to one single L1 category.

Additionally, the SLM proposes that it is possible for adult L2 learners to perceive the phonetic differences between L1 sounds and L2 sounds with "exaggerated acoustic cues, multiple instances by many talkers and massed listening experience" (Flege, 2004, p. 5). As noted in the literature review, second language experience contributes to the accurate perception of the target sounds. Because the participants of the present study did not receive explicit pronunciation instruction in their language classes, this lack of attention to the issue during classroom instruction may have prevented them from receiving input that enabled them to perceive the differences between the English low-back vowel/o/ and the corresponding Sinhala /o/. Also, as mentioned in the questionnaires, the participants learned English in formal settings and did not have much exposure to English outside of classroom. Although the participants use English in their daily interaction about $50 \%$ of the time, without specific instruction and guidance, it can be difficult for them to notice the phonetic differences discussed in this study.

The results of the analysis of the speech samples of the participants can be further explained according to the percentage of L1 use by the learners. Flege (2004) points out that the use of L2, as opposed to the learners' use of L1, also becomes a deciding factor in developing new phonetic categories. As Flege \& MacKay (2004) have shown, learners who use L2 more than their L1 have shown better pronunciation of English. All of the participants in the study claim to use Sinhala more than English in their daily lives. In fact, English use and practice seems to be limited to their graduate classes (personal communication with the participants). Therefore, it is apparent that these participants do not receive much English language experience. If they had, such experience might have increased their accurate perception and perhaps their production of the two vowels.

It is also important to note that the participants produced the low-back vowel $/ \mathrm{o} / \mathrm{in}$ some of the instances. However, they did not produce the low-back vowel in any of the instances in the free speech samples. As the SLM proposes, although learners may identify L2 sounds with L1 sounds at the beginning stages of their learning experience, it is possible for them to develop new phonetic categories with more language input. Here we can assume that the participants, who have been learning English for an average of 8 years, may have been able to notice the phonetic difference in some of the English words when they were focused on written scripts as presented during the first two data collection tasks. However, it seems that their knowledge of the phonetic difference between the L2 sounds and the corresponding L1 sounds still have not become internalized and implicit since they did not use the low-back vowel in any of their free speech samples even in instances when needed. This lack of low-back vowel production may be an even clearer reflection of the nature of their low-back vowel free dialect when using spontaneous speech.

In sum, the difficulty in producing the English low-back vowel / / / can be accounted for by lack of perception about the phonetic differences between Sinhala /o/ and the English / o . As a result, the participants identified $/ \mathrm{o} /$ as belonging to the established L1 vowel category, a process known as "equivalence classification" (Flege, 1988). Such an identification results in substitution of the L1 sound for the target L2 features. In addition, lack of pronunciation instruction, age of L2 acquisition, and percent of L1 use are found to be other factors that account for the difficulty in producing the vowels among the three Sinhala native speakers of English.

## Implications

"Pronunciation- like grammar, syntax and discourse organization- communicates; $\qquad$ .the very act of pronouncing, not just the words we transmit, is an essential part of what we communicate about ourselves as people..."(Beebe, 1978, cited in Morley, 1994, p. 67). Beebe's observation reflects a basic truism with respect to the pronunciation component of oral communication. In contemporary practice, language teaching may not emphasize the teaching of pronunciation and attaining native-like production of sounds. However, pronunciation should not be "banned to irrelevance" because accurate pronunciation certainly is an integral part of successful communication (Levis, 2005, p. 369). Although it may not be necessary to attain completely accent-free speech, one's pronunciation has to be clear and comprehensible. Hionofotis and Bailey (1980) believe that there is a threshold level of pronunciation in English. If L2 learners' pronunciation falls below the threshold, it is difficult to achieve comprehensibility despite proficiency in grammar and vocabulary (cited in Celce-Murcia, 1987, p. 5). As Morley (1994) proposes, pronunciation is the means of achieving comprehensibility and intelligibility. These ideas about the role of pronunciation in oral communication signal that pronunciation
pedagogy is not about achieving the unrealistic goal of "eradicating" accents, but it is about achieving at least a threshold level of intelligibility so that the quality of the speech does not inhibit the ability to communicate.

In addition, Beebe's observation demonstrates that pronunciation encompasses more than achieving linguistic competence and successful communication. It also includes achieving social competence, recognition and acceptance. As noted by Beebe, one's pronunciation projects powerful images about the speaker to listeners (Pennington, 1994). In a study of native speakers' attitudes toward the accents of immigrants in Sweden, Cunningham-Anderson (1990) found that Swedish listeners developed strong negative reactions to immigrants' pronunciation of some specific phonemes (cited in Pennington, 1994, p.103). Similarly, Morley (1994) brings up the point that unintelligible speech patterns may place learners "at serious risk educationally, occupationally, professionally, and socially" (p. 69). Additionally, she discusses some problems experienced by non-native speakers due to issues in pronunciation. Language learners could experience complete breakdown in communication, ineffectual speech performance, negative judgments about personal qualities, anticipatory-apprehensive reactions, and pejorative stereotyping due to pronunciation- related issues. Upon close examination of the problems presented by Morley, it is clear that deviation from the "norm" in pronunciation tends to result in negative judgments and stereotyping about the speakers. Similarly, Canagarajah (2005) points out that "one's accent easily evokes people's biases" (p. 365, Editor's note). According to LippiGreen (1997) an accent may serve as a basis for negative social evaluation and discrimination.

Similar to these observations, the substitution of the English low-back vowel / $/$ / and the mid-back vowel /o/ by Sinhala speakers of English results in negative judgments and apprehensive reactions in the perceptions of HPD speakers of Sri Lankan English Sri Lanka. As
noted earlier, this pronunciation feature can become a hindrance to LPD speakers' professional and educational success. Additionally, an analysis of the speech samples according to the theories of the SLM indicated that the participants' inability to produce the English low-back vowel $/ 0 /$ has a perceptual basis. They identified this English vowel as belonging to the Sinhala mid-back vowel /o/ category and thus substituted the target feature with the corresponding L1 in production. In my view, these findings about the perception and the production of the two English vowel sounds indicate the importance of pronunciation instruction. These participants who learned English as a second language in their early adolescence may have benefited from instruction on the phonetic differences between the English low-back vowel/o/ and the Sinhala /o/. Their increased awareness together with practice opportunities would have enabled them to form new phonetic categories to accommodate the English vowel as produced by speakers of HPD Sri Lankan English. Commenting on pronunciation instruction Morley (1994) mentions that it is not always advisable to believe that students are able to learn pronunciation on their own. Similarly, she proposes that instruction on pronunciation is fundamental because it enables learners to improve not only oral language skills but also "personal oral language strategies" (p. 67). Considering these views and observation, I believe it is important to teach the pronunciation of the English vowel contrast to speakers of LPD Sri Lankan English.

As a result, in order to meet the needs of the study's participants, an instructional framework that features both theory and practices of pronunciation learning is proposed. The basis for this curriculum lies in the multidimensional curriculum design for pronunciation teaching proposed by Morley (1994).

## Theories of pronunciation instruction/learning

"Research on foreign accents and their effect on communication...has much to offer to teachers and students in terms of helping them to set learning goals, identifying appropriate pedagogical priorities for the classroom, and determining the most effective approaches to teaching" (Derwing \& Munro, 2005, p. 379). Views on teaching pronunciation have undergone many changes in the history of language teaching. With the advent of audiolingualism in the 1960s, pronunciation was considered to be of paramount importance (Brown 2001, Levis 2005).A decade later, with the advent of different teaching approaches such as communicative language teaching, pronunciation received less attention. More recently, the role of pronunciation in the field of language teaching seems to have gained a different focus and eventually more recognition. According to Levis (2005), a focus on pronunciation should be neither unfairly elevated to the central skill in language learning nor ignored completely. Instead, pronunciation should be given its due relevance in English language classes as a means of achieving intelligibility and effective communication. Contemporary specialists of L2 teaching support the role of pronunciation as an essential means of achieving intelligibility and comprehensibility, pronunciation is viewed to be a vital subset within the complex mosaic of oral communication (Morley, 1994, Murphy, 1991).

When designing and developing a curriculum on pronunciation, how do language teachers decide on the scope of the instructional plan? According to Murphy (2001) first, it is necessary to perform a needs analysis and identify learners' educational and social goals. One of the issues associated with incorporating pronunciation into language classes is that teachers depend on their intuition to decide on the focus of the lesson. In contrast, Levis (2005) suggests that it is productive to adopt a research-based approach to pronunciation teaching. Taking this
suggestion even further, Derwing \& Munro (2005) suggest that teachers should rely on empirical evidence to identify the features that most affect intelligibility and comprehensibility. In this regard, it is not advisable to rely on common belief or one's perception of accent to determine the focus of instruction. An undue reliance on intuition and common belief may place teachers on insecure footings with it comes to actual language production situations. For example, Derwing and Munro (2005) demonstrate that when language teachers rely on intuition alone, learners might be directed to focus on the most salient feature of their accent, regardless of its influence on intelligibility. Because of excessive reliance on intuition, teachers could fall into the trap of neglecting the specific needs of the learners, thereby failing to address their pronunciation issue at all. In addition, Firth (1992) suggests that language teachers should also assess other learner variables when developing lessons and materials. For example, she points out that learner attitudes and motivation should also influence how much emphasis the instructor should places on pronunciation teaching (p. 174). Firth also includes learners' age, education, occupation, and length of residency as some of the significant factors that determine the focus of pronunciation instruction.

In my opinion, a research-based approach to pronunciation teaching is extremely beneficial to language learners because it enables teachers to develop lessons and materials to match their requirements. On the basis of a needs analysis and a research-based approach, the teacher can identify features that hinder intelligibility, features that would therefore merit special attention. Also, such an approach allows the teacher to identify the students' attitudes toward changing their pronunciation and thus to create the lesson in consultation with students.

In the recent past, there has been a renewed interest in incorporating pronunciation teaching into the teaching of speaking and listening skills. Derwing \& Munro (2005) suggests that teachers should focus on pronunciation as part of oral communication. Similarly, Murphy (1991) mentions that attention to speaking, listening and pronunciation should proceed in "an integrated manner" (p.52). He believes pronunciation to be "a subset of speaking and listening," which are major skill areas of interpersonal communication (p. 51). In this context, Murphy (1991) suggests that pronunciation should be taught through communicative activities in which the learners "engage in a meaningful exchange of information" (p.60). These views about teaching pronunciation acknowledge the importance of focusing on pronunciation as a means of achieving comprehensibility. In this regard, Derwing and Munro (2005) believe that "acquiring pronunciation is no different from acquiring syntax" (p.387). Instead of teaching pronunciation as an isolated entity, such an integrated approach focuses on increasing effective communication by enhancing intelligibility.

Another important aspect of pronunciation teaching is developing the objectives and the scope of an instructional plan. In the present study, based on the theories of SLM, it can be concluded that the participants substitute the low-back vowel / o/ with the Sinhala mid-back vowel /o/ due to failure to identify the phonetic difference between the two sounds. In this situation, how should language teachers address these specific needs of the target population? Pennington (1994) mentions that "in SLA, phonetic prototypes may at first be based on L1 prototypes, which are gradually altered based on input from and practice with the L2" (p. 99). Her observation indicates that perceiving a sound as different from any existing L1 phonetic category and forming a new category takes place with more input and practice. In order to pronounce the English vowel / $/$ /, learners first need to perceive the sound as different from the

Sinhala /o/. In this regard, it is important for them to be aware of the phonetic differences and then produce them accurately. Therefore, language teachers need to supplement instruction with plenty of input and opportunities to practice. Pennington (1994) further mentions that considerable amounts of speaking practice enable learners to "establish and automatize articulatory routines in a new language" (p.100). This automatization of the target features is an important concept in language teaching.

Nonetheless, exposure to input alone does not guarantee success in production. Although researchers have not been able to confirm a consistent and simple correspondence between perception and production, there has been consistent evidence of a strong relation between them (Leather and James, 1991, cited in Pennington 2005, pp.98-99). Therefore, if L2 pronunciation difficulties are found to be rooted in perception, it is important to provide the learners with perceptual training first (Derwing \& Munro, 2005). Derwing and Munro (2005) point out that discrimination and identification tasks are extremely beneficial in helping learners perceive sounds better (p. 388). Therefore, pronunciation instruction needs to begin with helping learners to perceive the target phonemes. Consequently, they will be able to achieve more success in production. According to Pennington (1994) another effective approach to increase learners' perception of the L2 sounds is to introduce the "phonological distance" between the L1 and the L2 (p. 96). She also suggests that using an "exotic symbol" to represent the L2 sound that is similar but not identical will enable the learners to notice and perceive "how different rather than how similar" the L2 sound may be (p. 101).

Another important aspect of pronunciation teaching is the role of explicit instruction. According to Hulstijin (2002) explicit learning refers to "a conscious deliberative process of concept formation and concept linking" (p. 206). This process requires advanced cognitive
development and, therefore, adult learners tend to benefit even more from explicit instruction in comparison with younger learners. Supporting this concept, Hulstijin (2002) mentions that adult learners who have developed strategies of language learning are perhaps "best served by explicit learning" (p. 210). Similarly, Derwing and Munro (2005) believe that just as students benefit from explicit instruction on grammar, learners can also greatly benefit from explicit instruction in the area of pronunciation. Pennington (1994) also suggests that because adult learners have the ability to compare and contrast and to recognize patterns in input, language learners can benefit from explicit instruction in pronunciation teaching. Considering these views, it is apparent that explicit instruction plays a productive role in pronunciation teaching and learning.

In sum, theories of language learning and language teaching emphasize the importance of adopting a research-based approach to pronunciation teaching. Research on pronunciation issues faced by the target population is extremely useful in determining the aims and objectives of the curriculum design. Therefore, language teachers should identify the target groups' specific needs based on their educational, professional, and social goals. As noted in the literature, pronunciation is closely tight to learner motivation, attitude toward the target language, and also identity. Therefore, any approach to pronunciation instruction should be handled carefully. In addition, the above discussion points out the importance of including the teaching of pronunciation within most settings of language teaching. In my view, teaching pronunciation is about enhancing communication via improved and accurate pronunciation. Moreover, the importance of input and many opportunities to practice and use the target sounds has also been discussed. This discussion of teaching and learning pronunciation serves as the basis for the curriculum design proposed in the next section.

## Design

## Objectives

The target audience of the instructional plan proposed in this paper is intermediate to advanced level ESL learners who study at universities in Sri Lanka. Most if not all such learners tend to incorporate the LP variety of Sri Lankan English in their speech production. The teaching context is an oral communication class with attention to pronunciation. Although the instructional plan is designed to address the perception and accurate pronunciation of the English vowel contrast $/ \mathrm{o} /$ and $/ \mathrm{o} /$, it is intended to be integrated within speaking and listening in oral communication classes. In this context, the aim of the instructional plan is not merely to enhance the production of $/ \mathrm{o} /$ and $/ \mathrm{\rho} /$ but to improve communicative competence through the accurate production of the vowel contrast. Goodwin (2001) points out that pronunciation instruction needs to be incorporated within communicative interactions along with other aspects of spoken discourse.

The specific goals of the instructional plan are as follows:
Functional HPD intelligibility: It is not the aim of the class to help learners attain native-like pronunciation of the English vowel system. Here, intelligibility refers to production of sounds that are "not distracting to the listener" (Goodwin, 2001, p. 118). Therefore, the aim is to help learners produce the vowel contrast $/ \mathrm{o} /$ and $/ \mathrm{o} /$ comprehensibly to minimize disruption to communication when in communication with speakers of HPD Sri Lankan English. Increased proficiency in the perception and production of the vowels will consequently improve the comprehensibility of their speech.

Functional communicability of HPD Sri Lankan English: Functional communicability refers to the learner's ability to function successfully within specific communicative situations (Goodwin, 2001, p. 118). Therefore, the aim is to help learners develop language to meet their communicative needs in educational, social and professional contexts when in communication with speakers of HPD Sri Lankan English. As a result, the objective of the instructional plan is to help speakers of LPD Sri Lankan English to differentiate this pivotal vowel contrast accurately. Increased perception and production of the vowels will enable them to communicate with speakers of HPD and gain wider social and professional acceptance and recognition in Sri Lanka. Increased self-confidence: to help learners develop confidence about their ability to differentiate the target vowels and to use them in communication to fulfill their communicative needs. Speech-monitoring abilities and speech modification strategies for use beyond the classroom: to help learners develop speech monitoring skills and learning strategies that will enable them to develop communicability, and confidence inside as well as outside the classroom (From Morley, 1994, p. 78).

## The syllabus

The syllabus of the instructional plan consists of three integrated components. First, the production of the target vowel contrast by the second language learners in the oral communication class is assessed. The objective of evaluating learner speech performance and its impact on communication is to determine the learners' current proficiency in producing / $\mathrm{o} /$ and $/ \mathrm{o} /$, and to develop lesson plans and activities accordingly. Secondly, the syllabus focuses on incorporating speaking and practice activities that match learners' real-life tasks. Because the target population of the instructional plan needs to perform various communicative tasks outside of classroom, the materials should be designed to match their needs and requirements. Finally, the curriculum aims at teaching strategies for learning pronunciation self-monitoring because one important goal of language teaching is to empower learners to continue learning beyond the language class. These particular foci of the curriculum are discussed in detail below

1. Assessing the intelligibility and communicability of the learner speech. Here the aim is to evaluate the pronunciation of the target vowel contrast and its impact on communication. For this purpose Morley (1994) suggests utilizing a "Speech Intelligibility Index" to assess speech progress (p. 76). The index consists of information on the current pronunciation level of the learners, a description of the characteristics of each level and its impact on communication. Although Morley's Speech Intelligibility Index is intended for assessing and describing the overall speech of the learners, it can be adapted to evaluate and describe the production of $/ \mathrm{o} /$ and $/ \mathrm{o} /$ specifically.

The following table demonstrates an index of standards adapted from Morley (1994) to assess the production of the target vowel contrast $/ \mathrm{o} /$ and $/ \mathrm{o} /$.

Table 4: Evaluation Index for describing the production of /o/ and / $\mathrm{o} /$ and its impact on communication

| Level | Description | Impact on Communication |
| :---: | :---: | :---: |
| 1 | Learner's production of the vowel contrast is unintelligible. The learner cannot accurately differentiate between $/ 0 /$ and $/ 0 /$, and $/ 0 /$ is substituted with /o/in speaking. Learner does not recognize the phonetic differences of the two vowels in listening tasks. | The inaccurate production of the vowel contrast interferes with oral communication. Learner fails to communicate what $\mathrm{s} / \mathrm{he}$ wishes to communicate. |
| 2 | Learner shows recognition of the low-back vowel $/ 0 /$ and accurately produces it in some of the frequent words in conversation. However, great listener effort is required to discern the meaning of the words. | Frequent disruptions of communication take place through the mispronunciation of the vowel contrast. |
| 3 | Learner shows improvement in producing the vowel contrast accurately when required. However, s/he tends to overuse the low-back vowel/s/. Does not demonstrate a clear understanding of the phonetic differences between the two sounds. | A considerable amount of disruption take places due to the overuse of $/ \mathrm{o} /$ |
| 4 | Learner shows a great amount of accuracy in identifying the differentiation. The tendency to overuse the low-back vowel is less. Occasional errors in identifying the phoneme in some infrequent words can occur. | The production of the vowel contrast causes little interference with communication. |
| 5 | Learner's production of the vowel contrast is accurate and intelligible. The learner accurately differentiates between the two phonemes and is aware of the change of meaning brought about by the two vowel sounds. | The accurate pronunciation facilitates communication. Learner communicates what $\mathrm{s} /$ he intends to communicate. |

(Adapted from Morley 1994, pp. 76-77)
The advantage of using a speech intelligibility index is that it allows the language teacher to evaluate learner speech in order to understand the level of competence. As a result, the teacher can identify learners' strengths and weaknesses and design lesson plans and activities accordingly. It also gives the teacher the opportunity to build upon the learners' existing
knowledge about the perception and production of the target vowel contrast. Larsen-Freeman (2001) mentions that "there is no need to teach everything....the teacher can build upon what the students already know" (p. 256). In addition, such an index allows not only the teachers but also the learners to assess their progress in producing the English vowel contrast. The teacher and the students can mark their level of achievement as the learning progresses.

Similarly, Firth (1992) suggests using a "diagnostic profile sheet" for each of the learners in the class not only to assess their current level of proficiency but also to mark their progress (See Appendix 3). She points out that a diagnostic sheet is not only a permanent record of strengths and weaknesses but also of progress within specific areas of pronunciation (p.175). For data collection purposes, she suggests 4 techniques of speech sample collecting: "contrastive studies, in-class surveys, oral reading, and spontaneous speech" (p. 174-175). Once the teacher diagnoses the learner's current level of pronunciation and develops the materials, Firth (1992) suggests that it is important to discuss the content and the focus of the syllabus with the students. Such an approach is extremely motivating for learners because the syllabus is more flexible, more learner- centered and more open to learner input in the designing process.
2. Development of learning, speech awareness, self-awareness, and self-monitoring strategies: strategies are "techniques for capitalizing on the principles of successful learning" (Brown, 2001, p. 208). The purpose of learning strategies is to help learners become independent learners with skills to continue learning and improving proficiency. Because of time constraints and diversity of learner goals and needs, most syllabi are designed to meet the general demands of a class. In this situation, it is important to provide the learners with the necessary tools and skills to continue learning and monitor their progress. Also, it prevents learners from becoming overdependent on the class and the class teacher. In my opinion, most language learners are not
aware of how to become successful learners. They are not aware of the specific skills that are useful to make the learning process more productive, result-oriented and meaningful. In this regard, the teaching of strategies can help the learners develop skills and tools to become successful learners. MacCarthy (1978) points out that without guidance from language teachers, learners might acquire "faulty habits" which may hinder them from becoming successful in pronunciation learning (p. 2). Therefore, it is apparent that learners need instructions and guidance not only about learning about also about developing effective strategies.

Morley (1994) discusses several areas of learning strategies that are effective in teaching pronunciation. She mentions that it is beneficial for the learners to develop language "learning strategies, self-monitoring skills, and speech modification skills" (pp 78-79, 81-82). Learning strategies include but are not limited to developing self-directed learning, acquiring learning tools and techniques to compensate when miscommunications take place, lowering one's anxiety levels, and seeking practice opportunities (Morley, 1994). In teaching the perception and production of $/ \mathrm{o} /$ and $/ \mathrm{o} /$, learners need to be encouraged to apply what they learn in the classroom to real-life situations. Also, learners can be encouraged to listen and notice the target vowel production in their daily interactions, in proficient speakers, and in media. This technique will enable them to retain the information learned in class better and also to identify the difference between the Sinhala mid-back vowel /o/ and the English low-back vowel / $\circ /$. Whereas learners may avoid speaking in English, learners should be encouraged to converse in the L2 as much as possible so that they can gain more practice opportunities in authentic situations.

Self-monitoring skills refer to developing speech awareness, self-observation skills, and positive attitude. Developing self-monitoring skills is effective with adult learners because they have highly developed analytical skills. Considering the teaching of the English /o/ and /o/ the
teacher needs to teach learners to pay attention to their production of language. Morley (1994) suggests that simple rehearsing activities such as "talking and listening to one self" are beneficial (p. 81). She also mentions that such skills gradually encourage the learner to become autonomous language learners. Also, encouraging learners to appreciate their progress and achievement is important in pronunciation teaching, because success in pronunciation may not take place immediately. Learning takes place gradually over time and learners need to learn to appreciate their gradual achievement.

Morley (1994) point out that the role of the teacher is to provide "cues" to modify learner's speech whereas the role of the learner is to "modify" his/her speech (p. 81). In this context, Morley (1994) believes that teachers need to gradually "shift from modeling to providing cues" to encourage pronunciation modification (p. 82). Such an approach will enable the learners to become independent learners, develop their own strategies of speech modification and eventually improved perception and production of the English vowel contrast. In sum, teaching learning strategies and self-monitoring and speech modification skills aims at developing a conscious and systematic use of learning tools and skills to achieve success in pronunciation.

## 3. A focus on practice activities and speaking task experiences matched to the communicative

 needs of the learner in personalized, real-life contexts. The third focus of the syllabus is using authentic communicative activities to enhance the perception and the production if the vowel sounds. This focus of the syllabus is closely tight to the evaluation of the speech production and the needs analysis discussed above. The purpose of learning the accurate pronunciation of the target vowel contrast is to help learners not only gain communicative competence but also recognition and acceptance in educational, professional, and social contexts. In this regard, theneed analysis will enable the teacher to recognize the specific communicative needs of the learners. For example, students may wish to improve pronunciation in order to become highly qualified candidates in the job market, because the inability to differentiate $/ \mathrm{o} /$ and $/ \mathrm{o} /$ places them at a disadvantage when seeking employment in Sri Lanka (Gunasekara, 2005). Some learners may wish to attain more intelligible pronunciation in order to pursue higher education either in Sri Lanka or in some other English speaking country. Whether their goal of learning pronunciation is finding a job or gaining more social recognition, it is crucial to create practice activities and tasks that match real-life tasks. Authentic language input and real-world tasks enable the learners see the "relevance of classroom activities to their long-term communicative goals" (Brown, 2001, p. 258). Valdman (1992) believes that "communicative ability both in the productive and receptive modes can be attained only if learners are exposed to a variety of authentic oral and written texts (Cited in Larimer \& Schleicher, 1999, p. v). Consequently, as learners gradually become more competent in interacting in authentic situations, they become more confident about their ability to speak and produce the sounds. Although it is not possible to meet each individual need of the learner, the use of authentic materials and practice activities produces more promising results.

## Types of learning/teaching activities

As mentioned in the discussion, it was concluded that the participants' inability to differentiate the English vowel contrast has a perceptual basis. As a result, pronunciation instruction should begin with accurate perception of the target features. Next, in order to reiterate the perception, the learners need to be given the opportunity to identify and discriminate the sounds in listening tasks. The teachers can then move gradually to controlled practice activities and to more communicative activities. The types of learning/teaching activities of the
instructional framework is based on the "Framework for teaching pronunciation communicatively" proposed by Celce-Murcia, Brinton, \& Goodwin (1996, p.36). The five stages of the pronunciation teaching framework, with corresponding activities are discussed below:

1. Description and Analysis: As noted above, it is pivotal to begin the lesson with description and analysis of the target sounds. Here, it is important for the learners to be informed of specific characteristics that distinguish the two vowels. In order to do so, it is important to clarify the height and the position of the tongue, the volume of the oral cavity as determined by jaw movement, and the position of the lips (Celce-Murcia, Brinton, \& Goodwin, 1996). Similarly, Browne \& Huckin (1987) point out that in teaching English vowel pronunciation, it is required to provide an "introduction to articulatory differences in production for which tongue position, lip position, jaw position, serve as basic parameters" (p. 47). The purpose of the initial introduction to the phonetic differences is to raise learner awareness and help them form new phonetic categories for the L2 sounds.

Because the present study is designed to address the pronunciation variation of adult ESL learners, it is effective to make use of the English vowel chart (See the discussion of activities and appendix 1 for examples) to describe the phonetic differences of the two vowels. Moreover, in my opinion, it is productive to introduce the phonetic symbols so that the learners are able to see the difference visually as well. In addition, Morley (1979) suggests that teachers could introduce a phrase or word that the students can associate each vowel with, rather than with a phonetic symbol (cited in Goodwin, 2001, p. 123).

| Ex: | NO LAW |  |
| :--- | :--- | :--- |
|  | $/ 0 /$ | $/ \mathrm{o} /$ |

Here, Morley (1979) suggests that the learners can be encouraged to repeat the word or phrases until they retain the difference between the two features. Consequently, in future
production activities, the learners are reminded of the word or the phrase instead of the phonetic symbol. Similarly, Celce-Murcia, Brinton, \& Goodwin (1996) suggest using a color-coding system to associate the pronunciation of the each vowel with a particular color that requires the accurate pronunciation of the each vowel. For example:
/o/
Mauve
/o/
gold

They further suggest using actual color cards and hanging them in the classroom as an easy reference. These activities not only make the students aware of the phonetic differences but also provide visual reinforcement to retain the information.
2. Listening Discrimination: Having learned the specific characteristics of the vowel contrast, the learners need to be given the opportunity to identify and discriminate them in listening. Celce-Murcia, Brinton, \& Goodwin (1996) mention that "tuning students' ears to the subtle differences between vowels is critical" (p. 112). Listening discrimination activities further expands learners' understanding of the contrast and help them associate the vowels with words. In this context, teachers can make use of vowel discrimination worksheets either with pictures or words (Grant, 2001). However, as Goodwin (2001) suggests it is pivotal to teach pronunciation in meaningful contexts. Instead of providing the learners with isolated words to distinguish the vowel contrast, it is beneficial to provide the examples and practice activities in contexts. Similarly, Brown (2001) strongly recommends that language needs to be "context embedded" (p. 90). When target language forms are embedded in context, it is more meaningful and allows the learners to use the context to discern the meaning, thereby "improving attention and retention" (Brown, 2001, p. 90).
3. Controlled Practice with feedback: This refers to further helping learners to discriminate the sound contrast in context. For example, the teacher can make use of short dialogues that consists of the target vowels to read, worksheets with minimal pair sentences to mark the correct answer, and kinesthetic activities using minimal pair contrast in contextualized sentences (Celce-Murcia, Brinton, \& Goodwin, 1996). These activities can be carried out as pair work or small group work, and provide a great opportunity for peer learning as well.
4. Guided Practice with feedback: In this phase, the activities are still geared toward identifying the vowel contrast, yet there is opportunity for production as well. Information gap activities are ideal in this context. These activities allow students practice both listening discrimination and spoken production as well. Also, the opportunity for peer feedback is built into these activities, thereby allowing the learners to communicate more and learn better.
5. Communicative Practice with feedback: Communicative activities provide more opportunity for the learners to produce the target vowel contrast in interaction. These activities also involve negotiation of meaning, more interaction with the peers and more opportunity for practice. Strip stories, creating small dialogues, role plays, problem-solving games, sociodrama simulations, and person to person communicative activities are classic examples of communicative practice activities. (Celce-Murcia et al, 1996, Grant, 2001, Murphy, 1991). Another advantage of these activities is the use of pair work, group work and thus peer learning.

In addition to the learning/teaching activities discussed above, it is extremely productive to make use of modern technological media in pronunciation instruction. According to Brinton (2001) the careful use of media in language teaching can help to "economize the teaching task" (p. 461). The media appeals to learners' senses and help process and retain the information.

Brinton (2001) mentions that language teaching media ranges from technological innovations to audio-visuals available. She also mentions that language teachers need not make use of costlier technical media to develop effective lesson materials and activities. Instead non-technical media such as wall charts, posters, pictures, photos, newspapers and magazines make great resources (p. 462). Another benefit of using medial in language teaching is it provides a way to address the needs of both "visual and auditory learners" (Goodwin, 2001, p. 461). Christison (1996) points out that sources such as music, jazz chants, videos, movies, and charts are helpful in teaching learners with music and visual intelligences. Therefore, incorporating media into teaching pronunciation is an acknowledgement of the diverse learning styles and multiple intelligences. It is also the means of addressing varied learner interests and needs.

Use of audio and video is also an effective and constructive way of improving pronunciation. Audio recording is the most basic way to capture sounds for review (Goodwin, 2001). Audio recording can be used in several ways. The learner can record a speech sample either from an actual speaking context i.e. news broadcast, a radio discussion or a reading by the teacher. This will give the learner the opportunity to listen to the target model and then practice and record his/her speech. The tape can be presented to the teacher for feedback or learners can work in groups and review their peers' recordings. Also, audio recording can take the form of a vocabulary book. Here, learners can be encouraged to record a certain number of words each week and the teacher can listen to the pronunciation of the target words and record his/her feedback in the cassette itself. According to Goodwin (2001) this motivates learners to make choices about what they want to learn. Also, the teacher can understand the learner's needs and interests. Above all, listening to one's own language production is a very effective way of improving pronunciation. In this context, the learner can identify the differences in one's own
production and the accurate production represented in either the teacher's recording or in the authentic speech sample. Similarly, video also can be used as an effective learning tool. It is a powerful medium that is beneficial in self-monitoring and receiving feedback. Teachers can encourage learners to tape student speeches, discussions, role-plays in order to evaluate and examine the production of the target features.

## Role of students

Learners are required to take active participation in learning to produce the English vowel contrast $/ \mathrm{o} /$ and $/ \mathrm{o} /$. Conscious involvement in the speech modification process is crucial for accurate perception and production of the target features. Morley (1994) mentions that in order to become intelligible and confident speakers of English, learners need to develop "awareness, self-observation skills, self-modification skills, a sense of responsibility and a construction of a personal repertoire" (pp. 88-89). In this context developing awareness refers to learning to become aware of the perception and the production of the sound contrast and one's role of modifying and altering speech production. Acton (1984) suggests that learners should be responsible for improving their pronunciation by practicing the target features methodically on a daily basis. Also, learners need to develop learning strategies and skills in order to continue to improve their production.

It is also important for learners to develop a positive attitude toward learning pronunciation. They should realize that learning to speak in the prestige variety is a way of obtaining the skills to meet educational and professional expectations. Otherwise, it is difficult for the learners to become consciously involved in the learning process. Here, learning to appreciate small achievements and developing systematic and consistent approach to learning bring out more promising results. In addition, seeking out opportunities to converse in English,
learning and practicing the accurate pronunciation of the target feature outside of class, and actively taking part in pair work and group work are some of the positive attributes that learners need to develop in pronunciation teaching.

## Role of the teacher

According to Morley (1994) the role of the teacher is that of a "speech-pronunciation coach" (p. 88). In this regard, the teacher assesses learners' current speech pronunciation proficiency, identifies their specific needs and takes measure to address pronunciation issues. $\mathrm{He} /$ She provides information, gives cues to modify speech, provide suggestions and provide a wide variety of practice opportunities (Morley, 1994). The teacher is also responsible for making the learners aware of the importance of learning accurate pronunciation i.e. as a means of achieving success in social, educational, and professional endeavors. Also, the teacher should take measures to set realistic goals for the learners. For example, it is not possible for the learners to learn the pronunciation of all the words that contains the phoneme $/ \mathrm{s} /$. If learners are forced to achieve such an unrealistic goal, they might become frustrated and de-motivated when faced with failure. As Morley (1994) mentions the teacher also might feel frustrated and less confident about his/her ability to improve learners' pronunciation. Therefore, it is important to set high but, realistic goals so that learners feel confident as they progress in the learning process, and the teachers feel successful as the learners gradually attain the goals. Additionally, setting realistic goals from the beginning has another benefit. When learners are able to attain a certain amount of proficiency and become confident about their pronunciation, it motivates them to continue to learn and acquire the accurate pronunciation beyond their language classes. Successful pronunciation pedagogy involves empowering the learners to continue to learn on their own as well.

The teacher will play the role of a facilitator in teaching the accurate pronunciation of the vowel contrast. In order to achieve success in pronouncing $/ \mathrm{o} / \mathrm{and} / \mathrm{o} /$, it is crucial for the learners to receive constant guidance and instruction from the teacher. In addition, the teacher needs to discuss the importance of learning the accurate pronunciation of the vowel contrast. It is important for the learners to realize that the pronunciation component that is geared toward enhancing the accurate production of the English vowel contrast aims at increasing the learners’ competence, thereby making them more recognized socially, educationally, and professionally.

Another important responsibility of the language teacher is to provide constant and consistent feedback. In this regard, Goodwin (2001) suggests that teachers avoid overwhelming learners by correcting each and every pronunciation error. Instead, it is more practical and productive to be selective and to turn production errors into learning opportunities. At this point, it is important for both the learners and the teacher to realize that learning takes place gradually and that mistakes are part and parcel of the learning process. It is very unrealistic to expect sudden improvement in pronunciation. Learners, particularly adult learners take time to internalize input and adjust their perception of the new sounds. As noted in the literature review, learners become aware of the phonetic differences between the sounds in L1 and the corresponding sounds in their L2 as they gain more language experience. Therefore it is vital to realize that learning takes place gradually, and that mistakes are actually learning opportunities. Goodwin (2001) suggests that "it is the errors that learners make that guide us toward what to teach" (p. 130).

The following is the daily plan designed to achieve the goals and objectives of abovementioned curriculum design. These activities focus on improving both the perception and the production of the vowel contrast of the target population

## Daily Plan:

Day 1, lesson 1 (Duration 1 hour) Activity I
The lesson begins with a needs analysis of the learners. First, the learners will make audio recordings of the reading aloud of the diagnostic passage (see Appendix A) and a free speech sample in the language lab. For the free speech sample, the teacher can provide a list of simple topics or can request the learners to brainstorm some topics. In this context, it is also beneficial to request the learners to read either sentences or short reading passages that contain the English mid-back vowel /o/ and the low-back vowel / $/$ /. The teacher can utilize these recordings of the learners to identify the individual pronunciation issues of the class. For example, some learners may tend to substitute the low-back vowel/o/ with the mid-back vowel /o/ whereas some learners may overuse the low-back vowel/o/. The teachers can make use of the Speech Index for describing the learners' production of $/ \mathrm{o} /$ and $/ \mathrm{o} /$ and its impact on communication.

Activity I - part 2
From the beginning of pronunciation learning, it is important for learners to recognize their pronunciation issues and specific needs. In order to do so, the teacher can make a similar audio recording and give the learners the opportunity to compare their own production with the teachers' pronunciation. This activity can be conducted in small groups where learners listen to the teachers' recording and the individual recordings of the members. In small groups they can identify the pronunciation differences between their pronunciation and the teacher's pronunciation (20 minutes). After that the teacher can conduct a whole class discussion of the pronunciation differences and the specific words that contain the target vowel sound. (15 minutes)

This activity has an important objective. It exposes the learners to the accurate pronunciation of the vowel contrasts and helps them realize the difference between their pronunciation and the accurate pronunciation. This activity is a self-assessment tool for the learners to identify their pronunciation needs.

## Activity II

This activity aims at building learners awareness of the phonetic differences between the English vowel contrast and the corresponding Sinhala vowel. In order to do so, the teacher can introduce the Standard Sri Lankan English vowel chart (see Appendix D) and describe the articulatory organs involved in the production of the vowels. It is also beneficial to give the learners the opportunity to compare and contrast the Sinhala vowel chart and the English vowel chart. This will increase their perception of the L2 sounds. The discussion of the phonetic differences of the sounds will include the part of the tongue involved (front, central, back) in the production of the two vowel contrasts ( $/ \mathrm{o} /$ and $/ \mathrm{\rho} /$ ) and will be complemented with the production of the sound. For example, learners need to identify the differences between $/ \mathrm{o} /$ and $/ \mathrm{o} / \mathrm{in}$ listening. In addition, the learners will be introduced to the phonetic symbols (IPA). If the teacher does not wish to teach the entire IPA chart, he/she can introduce the phonetic symbols of the target sounds $/ \mathrm{o} / \mathrm{and} / \mathrm{o} /$ only. The purpose of this activity is to build learners awareness and make them independent language learners. For example, in the future, if they wish to learn the pronunciation of a certain word that contains the phoneme /o/ they will be able to refer to a dictionary and identify the correct pronunciation. (20 minutes).

## Activity III

This is a minimal pair drill activity. In modern pronunciation teaching drilling and memorization may not be considered the best approach to teaching but, it also produces some promising outcomes. In fact, the aim of this activity is to give the learners the opportunity to feel the difference in the vocal tract, the position of the lips and the tongue when producing the two contrasts. Also, it is a good opportunity for them to hear their own production. Most of the time Sri Lankan students have a vague notion about the two vowel sounds. Some students, when pronouncing words like 'walk' and 'woke', tend to produce a vowel sound that is neither the low-back vowel $/ \mathrm{\rho} /$ nor the mid-back vowel /o/. This is a clear indication of their uncertainty about the two contrasts. Therefore, practicing and rehearsing would enable them to retain the sounds better. (5 minutes)

## Day 2, Lesson 2

The aim of this lesson is to improve the learner's ability to distinguish the target vowel contrasts in listening. As Grant (2001) points out, most students find it difficult not only to pronounce the L2 vowels but also to "hear the difference between vowel contrasts" (p.192). Therefore, the following activities will not only enhance the student's listening skills but will also serve as a "diagnostic to ascertain whether students are able to perceive specific vowel contrasts or not" (Celce-Murcia et al, 1996, p. 115)

## Activity I

The lesson starts with a simple but interesting activity. The students will work with a worksheet that contains pictures. As the teacher reads a list of words that contains the phoneme $/ \mathrm{o} /$, the learners will underline the correct picture. This activity will enable the students to associate the phonemes to the visual aspect and then to realize that accurate pronunciation leads to
intelligibility. For example, the meaning of the word depends on the accurate production of the vowel. The learners will not be able to identify the correct picture unless the sounds are pronounced accurately. This understanding about the relation between sound production and meaning is important in pronunciation learning. (10 minutes)

## Activity II

In this activity, the learners will identify $/ \mathrm{o} /$ and $/ \mathrm{o} / \mathrm{in}$ minimal pair sentences. The learners will work in pairs. They will be given two worksheets named A and B. Each worksheet contains sentences and answers. Student A reads the sentences while the student B underlines the correct answer in his/her worksheet. When the student B reads the sentences in the worksheet, student A underlines the correct answers. The main objective of this activity is to help learners distinguish the two vowel sounds better. Unlike in the previous activity, the learners now get the opportunity to notice, read and practice the target sounds in sentences. Furthermore, the learners will be more convinced that accurate pronunciation leads to intelligibility. They will comprehend that the meaning of the sentence can change due to inaccurate pronunciation of the vowel sounds. Another important goal of this activity is peer learning. As the students identify their pronunciation errors and learn the description and analysis of the target words in lesson 1, they are able to monitor their peer's speech production and teach each other. Peer learning is identified as one of the more promising methods of language teaching because it enhances the performance of the students who are not willing to make mistakes in front of the classroom. (15 minutes)

## Activity III

In activity 3 , the learners work in the language lab. They will receive audio tapes that contain the recording of 20 words learned in activity I and II in day of class. Nowadays, teachers can even make use of CDs for this purpose. The students record the same 20 words in the cassette provided by the teacher. Once they do so, they listen to the teacher's recording and to their own recording. The objective of this activity is to help the students learn to monitor their pronunciation. The teacher helps them when they come across any difficulties. (20 minutes) Activity IV

The fourth activity takes it a step further. It involves listening, speaking and also the use of phonetic symbols. The students work with a partner. As one student reads the first five sentences the other partner marks on the sheet whether the target word contains the low-back vowel /o/ or the mid-back vowel /o/, using the phonetic symbols. After that they switch roles and the second partner reads the sentences. However, before they start the activity the teacher reads the first 5 sentences while the students mark the symbol on the sheet. In my opinion, this activity will enable the students to enhance their understanding of the two vowel sounds and also to be more familiar with the phonetics symbols. As I mentioned in the first lesson, the introduction to phonetics would aid them to become independent learners as they are able to refer to the dictionary when they are uncertain about the pronunciation of words. ( 15 minutes)

## Day 3 - Lesson 3

The general objective of this lesson is to improve pronunciation of the target vowel sounds via more interactive teaching techniques that cater to the multiple intelligences of the students. In lessons 1 and 2, the learners were exposed to various speech samples in the formal classroom setting. In lesson three, I wish to train them to notice and to learn pronunciation from movies,
songs and even advertisements. Most specialists realize that learners have multiple ways of learning. Some learners prefer learning through songs, drama and even pictures. Therefore, when they are introduced to media as a learning tool they tend to learn pronunciation more effectively and productively. In order to achieve this goal, lesson three contains activities that are both controlled practice with feedback and guided practice with feedback.

Activity I
This is a controlled practice activity with feedback. This activity involves a dialogue that contains the two vowel contrasts $/ \mathrm{o} /$ and $/ \mathrm{o} /$. The first step would be to locate all the words containing the phoneme / o . The students work in pairs and once all groups have identified the words the teacher discusses the answers with the students and help them learn the accurate pronunciation. Having done so, the students practice the dialogue with their partners. They can read the dialogue while acting the situation. This activity combines both listening and speaking. The primary goal of this activity is to help the students to listen to the vowel sounds, and articulate them correctly in more of real life situation. Here the teacher can take a step further by asking the learners to add a different ending to the dialogue, changing the scenario or even by adding a different character. ( 20 minutes)

## Activity II

In this activity, the students watch two video clips (www.youTube.com) from the comedy 'Friends' and in groups of two, they jot down the words that contain the target words. Then the students read and rehearse the words they wrote down. Finally the teacher provides them with the transcripts of the two video clips and the students read and act dialogues in groups of three. (25 minutes)

## Activity III

Next, the students move on to a guided activity with feedback. The students once again work in pairs and they have to fill the empty boxes in the worksheet by asking for information from the partner. For example, student A can ask 'what is the word in box A 4?' This activity would convince the learners the importance of accurate pronunciation. As feedback is immediately available, the students can immediately identify the problematic words for them. (15 minutes) Day 4, Lesson 4

Lesson 4 aims at building more communicative skills. As this is the fourth day of class the students are more competent in pronouncing the target vowel sounds and are more confident in using the target words in sentences.

Activity I: Strip story
This activity is interesting, interactive and enables the learners to retain the target words. The students will be provided with a story written in strips. These strips are not in chronological order. The students have to unscramble the sentences and then arrange them to make a story. They will work in groups of three. This activity is an excellent source of learning because the learners have to read, discuss and negotiate the meaning of the sentences to arrange them. Once they arrange the sentence the students will have to read the story to the class. This activity will help the students acquire the accurate pronunciation rather than consciously learning it in the classroom. The teacher can even encourage the learners to write a similar story, change the ending, or then act the scenario (20 minutes).

## Activity II

This is an activity in which the students will work in groups of three. The teacher will present the following prompt to each group.

1. You are a graduate student who has recently arrived in the US. Your academic program commences next week and you are still looking for an apartment. Telephone a Housing agency to inquire about a suitable apartment that is close to your college.

First the students will be instructed to brainstorm a list of words that contain the target vowel sounds within the group. After that they will be required to write a dialogue and present it to the class. (30 minutes). The activity is built around a real life situation and therefore, the students will be more confident when conversing in similar situations.

Activity III (wrap up)
In this activity, the learners are instructed to re-record the previously recorded 20 words (see Activity III, Day 2). They can now evaluate their own production and also compare it to the teacher's recording. The aim of this activity is to allow the learners to assess their progress in pronunciation. Having followed the lessons for four days, they will be able to gain the accurate pronunciation of the target sounds.

The activities presented in this paper serve as general pronunciation activities that enhance learners' ability to differentiate the vowel contrast. As discussed earlier, teachers should determine the content of the course by carefully analyzing learner needs and objectives. Also, it is useful to structure the course in collaboration with the learners. Therefore, it is difficult to determine the kind of activities that will enhance the production of the vowel contrast beforehand. As a result, language teachers should adapt and modify the activities described above to meet the demands of the learners.

## CHAPTER 6

## CONCLUSION

At the early stages of my English language learning experience, whenever I substituted the English low-back vowel/o/ with the mid-back vowel/o/, the instructor used to remind me that "it's godee ${ }^{5}$ to speak like that". She insisted that I pronounce words like "caught, call, and hall" accurately and instructed me to circle all the words that require the pronunciation of the lowback $/ 0 /$ in my handouts and notes. She further asserted that the ability to differentiate $/ \mathrm{o} / \mathrm{and} / \mathrm{o} /$ in production is a significant marker of proficiency. Little did I realize that this English vowel contrast carries considerable social impact in a Sri Lankan context. As noted earlier, the inability to differentiate the vowel contrast is stigmatized (and even sniggered at) in Sri Lanka. Speakers who mix the two vowels are considered to belong to a less prestigious social class; the social class of speakers of LDP Sri Lankan English. Despite their proficiency in grammar and lexis, the members of this social class are labeled as less proficient speakers who profess to be proficient in English. In addition, failure to produce the vowel contrast accurately places these speakers at a disadvantage professionally and educationally. As Gunesekera (2005) puts forth more prestigious employment opportunities are restricted to those who speak the HPD of Sri Lankan English.

For these reasons, this research paper investigated the production of the English vowels $/ \mathrm{o}$ / and / $\mathrm{o} /$ by Sinhala speakers of LPD English. Further, the paper attempts to discuss the acquisition process in order to explore reasons behind the inability to differentiate English /o/ and / $/$ /. According to the hypotheses of the Flege's (1992) Speech Learning Model as discussed in the review of the literature, one explanation for the LPD production of the L2 sounds in

[^3]English may lie in the perception abilities of Sri Lankan learners. The study supports the position that age of L2 learning and percentage of L1 and L2 use may also be influential considerations. Because the participants claim to use Sinhala more than English in their daily interactions, their tendency to rely upon their L1 may limit their opportunity to be exposed to the L2. As a result, they receive limited opportunities to notice the difference between the two sounds in other speakers of English. Finally, a curriculum design that focuses on enhancing the learners' perception and production of the vowels is proposed. The instructional framework proposes that instead of teaching pronunciation as a separate element, it is important to integrate it with language teaching as a means of enhancing communicative competence. The syllabus discusses theories of pronunciation teaching, possible practice activities and the role of both the teacher and the learners. Finally, it proposes pronunciation activities that can be utilized and adapted to teach the accurate production of the vowel contrast not only to Sinhala speakers of English but also to other learners with different language backgrounds and proficiency levels who may also manifest lack of low-back vowel usage in their spoken English.

In my view, the findings of the study reveal important information regarding the process behind the learning of L2 sounds and the role of pronunciation instruction in language teaching. For instance, stigmatization of "Not Pot English" in Sri Lanka signals just how important it is to incorporate pronunciation instruction within programs of language teaching. Although it is an attempt to shift the production of the vowel contrast in the direction of the higher prestige variety, I believe that language teachers should prepare learners to face whatever might be the professional and educational challenges before them. Besides, there are daunting socio-linguistic pressures placed upon speakers of LPD Sri Lankan English to be able to use the HPD in some circumstances such as professional and educational contexts. Ability to speak the HPD paves the
way for its speakers to overcome employment barriers in Sri Lanka. Here, learning what is considered to be the "accepted" form of pronunciation is not about changing one's identity. It is about obtaining a skill and a tool to utilize in order to be successful professionally and educationally. In my view, it is ethically unreasonable for a language teacher to impose a high prestige variety on learners, but it is a legitimate part of a language teacher's responsibilities to make students better aware of the social, educational, and professional pressures they will face as they continue to move into the wider world of English language use. In Sri Lanka, these pressures include learning to operate well within social, educational, and professional circles of HPD Sri Lankan English. According to Ur (2008), a teacher has an "obligation and a commitment" to his/her learners to teach the most accepted and the useful forms. After teaching more than five English language courses for a period of three years in Sri Lanka, I have come to realize that most L2 learners tend to neutralize the two vowels not because they choose to do so but because they lack knowledge about the phonetic difference between the two sounds. As most of them learn English to succeed educationally and professionally, I think language teachers should a focus on this feature of HPD Sri Lankan English pronunciation with the aim of assisting learners in becoming more qualified for employment opportunities.

In the final sections of the paper, I outline a plan of pronunciation instruction that will enable learners to more accurately perceive target sounds in their L2. As the existing literature on perception and production of L2 sounds reveals, learners' ability to form new phonetic categories to accommodate new sounds in a second language remains intact across lifespan. As a result, learners gradually learn to produce the sounds accurately with input and more practice opportunities. Therefore, language instruction plays a significant role in enhancing learners' communicative competence by enhancing pronunciation.

Although the paper addresses an important topic, the research reported has certain limitations. First, because the study analyzed speech samples of only three Sinhala native speakers of English, the findings cannot be generalized to all language learners. In the future, it will be beneficial to extend the study to a larger sample of L2 learners or to a sample size of different L1 backgrounds. In addition, in order to find the reasons behind the mixing of the two vowels, it is important to further examine the participants' motivation and attitudes about learning pronunciation or about HPD Sri Lankan English.

Given these limitations, the study provides important information regarding the speech patterns of LDP of Sri Lankan English that should be beneficial not only for learners but also for language teachers in Sri Lanka. In my experience, first as a language learner and then as a language teacher, there is less attention given to pronunciation instruction in Sri Lankan language classes than is given to other areas. However, many of the specialists cited in this paper indicated that pronunciation teaching is a vital component of oral communication. Although pronunciation teaching depends on learners' attitudes, views and objectives, it is the responsibility of the language teachers to lead learners in becoming more aware of language skills and abilities that are advantageous socially and professionally. In this regard, it is my hope that this study will inspire other language teaching professionals in Sri Lanka to examine further not only the stigma associated with some features of LPD pronunciation but also to examine pronunciation instruction as a means of achieving success in educational and professional domains.

## REFERENCES

Acton, W. (1984) Changing fossilized pronunciation TESOL Quarterly, 18, 71-85
Brinton, D. M. (2001). The use of media in language teaching. In M. Celce-Murcia (Ed.), Teaching English as a second or foreign language.: NY: Heinle \& Heinle.

Celce-Murcia, M., Brinton, D. M., \& Goodwin, J. M. (1996). Teaching pronunciation: A reference for teachers of English to speakers of other languages: Cambridge University Press.

Christison, M. A. (1996). Teaching and learning languages through multiple intelligences. TESOL Journal 6(1), 10-13.

Derwing, T. M., \& Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. TESOL Quarterly, 39(3), 379-397.

Fernando, S. (1985). Changes in Sri Lankan English as reflected in phonology. University of Colombo Review, 5.

Firth, S. (1992). Pronunciation syllabus design: A question of focus. In P. Avery \& S. Ehrlich (Eds.), Teaching American Pronunciation (pp. 173-182): Oxford University Press.

Flege, J. E. (1992). Speech Learning in a second language. In C. A. Ferguson, L. Menn \& C. Stoel-Gammaon (Eds.), Phonological Development Models, Research, Publications: York Press.

Flege, J. E. (1995). Second language speech learning: Theory, findings, and problems. In W. Strange (Ed.), Speech Perception and Linguistic Experience Issues in Cross-Language Research: York Press.

Flege, J. E., Bohn, O., \& Jang, S. (1997). Effects of experience on non-native speakers' production and perception of English vowels. Journal of Phonetics, 25, 437-470.

Flege, J. E., \& MacKay, I. R. A. (2004). Perceiving vowels in a second language. Studies in Second Language Acquisition, 26, 1-34.

Frieda, E. M., \& Nozawa, T. (2007). You are what you eat phonetically. In O. Bohn \& M. J. Munro (Eds.), Language Experience in Second Language Learning: In honor of James Emil Flege: John Benjamins Publishing Company.

Goodwin, J. (2001). Teaching pronunciation. In M. Celce-Murcia (Ed.), Teaching English as second or foreign language (pp. 117-137): NY: Heinle \& Heinle.

Goodwin, J., Brinton, D. M., \& Celce-Murcia, M. (1994). Pronunciation assessment in the ESL/EFL curriculum. In J. Morley (Ed.), Pronunciation Pedagogy and Theory: New Views, New Directions: TESOL.

Grant, L. (2001). Well Said: Pronunciation for clear communication (2nd ed.): Heinle \& Heinle, Boston.

Gunesekera, M. (2005). The postcolonial identity of Sri Lankan English: Katha Publishers.
Hulstijn, J. (2002). Towards a unified account of the representation, processing and acquisition of second language knowledge. Second Language Research, 18(3), 193-223.

Iverson, P., \& Evans, B. G. (2007). Learning English vowels with different first-language systems: Perception of formant targets, formant movement, and duration. Journal of Acoustical Society of America, 122(5), 2842-2854.

Jenkins, J. (2000). The phonology of English as an International Language, OUP
Larimer, R. E., \& Leigh, S. (1999). Introduction. In R. E. Larimer \& S. Leigh (Eds.), New Ways in Using Authentic Materials in the Classroom: TESOL.

Larsen-Freeman, D. (2001). Teaching grammar. In M. Celce-Murcia (Ed.), Teaching English as a second or foreign language (3rd ed., pp. 249-250): Boston: Heinle \& Heinle.

Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching TESOL Quarterly 39(3), 369-377.

Lippi-Green, R. (1997). English with an accent: Language, ideology, and discrimination in the United States: Routledge: London and New York.

MacCarthy, P. (1978). The Teaching of pronunciation: Cambridge University Press.
Morley, J. (1994). Multidimensional curriculum design for speech-pronunciation instruction. In J. Morley (Ed.), Pronunciation Pedagogy and Theory: New Views, New Directions (pp. 64-91): TESOL.

Murphy, J. M. (1991). Oral communication in TESOL: Integrating speaking, listening, and pronunciation. TESOL, 25(1), 51-75.

Parakrama, A. (1995). De-Hegemonizing language standards: Learning from (post) colonial Englishes about 'English': St. Martin's Press.

Pennington, M. C. (1994). Recent research in L2 phonology: Implications for practice. In J. Morley (Ed.), Pronunciation Pedagogy and Theory: New views, New Directions: TESOL.

Premawardena, N. C. (2005). Pronunciation difficulties encountered by Sinhala native speakers in learning German as a foreign language. Sabaragamuwa University Journal 05(1), 4858.

Rajadurai, J. (2007). Intelligibility studies: A consideration of empirical and ideological issues: World Englishes, 2007: 87-98

Rochet, B. L. (1995). Perception and production of second-language speech sounds by adults. In W. Strange (Ed.), Speech Perception and Linguistic Experience Issues in CrossLanguage Research: York Press.

Ur, P. (2008, April). "Correctness and correction" Plenary, TESOL, New York

## APPENDICES

## APPENDIX A: DIAGNOSTIC PASSAGE

## Read the following passage

If English is not your native language, people may have noticed that you come from another country because of your "foreign accent". Why do people usually have an accent when they speak a second language? Several theories address this issue. Many people believe that only young children can learn a second language without an accent, but applied linguists have reported cases of older individuals who have mastered a second language without an accent. Another common belief is that your first language influences your pronunciation in a second language. Most native speakers of English can, for example, recognize people from France by their French accents. They may also be able to identify Spanish or Arabic speakers over the telephone, just by listening carefully to their pronunciation. Does this mean that accents can't be changed? Not at all! But old habits won't change without a lot of hard work, will they? In the end, the path to learning to speak a second language without an accent appears to be a combination of hard work, a good ear, and a strong desire to sound like a native speaker. You also need accurate information about the English sound system and lots of exposure to the spoken language. Will you manage to make progress, or will you just give up? Only time will tell, I'm afraid. Good luck, and don't forget to work hard!
(From Celce-Murcia et al, 1996, p. 398)

## Read the following sentences.

1. All the students study hard to get through the scholarship exam.
2. I do not want to call my friend in the middle of the night.
3. I promised to meet Smith at the station.
4. He caught a man who was trying to steal a coat.
5. My neighbor bought a boat last year.

## Choose one of the following topics

1. My favorite childhood memory.
2. My hometown
3. My major field of interest.
4. How I spend my leisure time

## APPENDIX B: BACKGROUND QUESTIONNAIRE

1. What is your native language?
2. What is your major?
3. Are you an undergraduate or a graduate student?
4. How long have you been in the US?
5. Approximately what percentage of time do you speak English each day (as opposed to your native language)
Circle one: $0-20 \% \quad 20 \%-40 \% \quad 40 \%-60 \% \quad 60 \%-80 \% \quad 80 \%-100 \%$
6. When did you start learning English as a second language?

Specify the age $\qquad$
7. How long have you been learning English?
..............years
8. How did you learn English as second language? (Underline all that is relevant)

School
By attending classes
By speaking with friends/family/relations etc
By following a course (Specify the name of the course, duration, and year)
Other specify
Underline the relevant answer for the following questions
9. Have you followed any English courses? Yes/ No
10. Have you taken English classes in US? Yes / No
11. Are you attending any English language classes at the moment? Yes / No
12. How do you rate your proficiency in English?
Speaking: Excellent Very good Good Fair
Listening: Excellent Very good Good Fair
Writing: Excellent Very good Good Fair
Reading: Excellent Very good Good Fair
13. How do you rate your pronunciation?

Excellent Very good Good Fair
14. Have any of your previous English teachers taught you about pronunciation? Yes/No
15. Have you ever felt that people have misunderstood you because of pronunciation? Yes/No
16. What are your biggest pronunciation difficulties in English?
(Adapted from Celce-Murcia et al, 1996)

## APPENDIX C：THE RATERS＇ASSESSMENT OF THE VOWEL PRODUCTION

| Participant 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\overline{0}$ <br> 30 <br> $\vdots$ <br>  <br> $\stackrel{5}{1}$ |  | $\begin{aligned} & N \\ & \vdots \\ & \vdots \\ & \stackrel{N}{\mathbb{N}} \end{aligned}$ |  |
| Passage |  |  |  |  |
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| Noticed | ／o／ | ／o／ | ／o／ | マ |
| From | ／0／ | ／0／ | ／ $\mathrm{N} /$ | 源 |
| Because | ／0／ | 10／ | 10／ | 『 |
| Of | ／0／ | ／0／ | ／o／ | 区 |
| Foreign | ／0／ | ／o／ | ／o／ | 区 |
| Only | ／o／ | ／o／ | ／o／ | V |
| Reported | ／o／ | ／o／ | ／o／ | V |
| Of | ／0／ | ／o／ | ／o／ | 区 |
| Older | ／o／ | ／o／ | ／o／ | V |
| Common | ／0／ | ／o／ | ／o／ | 区 |
| Most | ／o／ | ／o／ | ／o／ | $\square$ |
| For | ／0／ | ／o／ | ／o／ | 囚 |
| From | ／3／ | ／o／ | ／o／ | 区 |
| Also | ／0／ | ／o／ | ／o／ | 区 |
| Or | ／0／ | ／o／ | ／o／ | 区 |
| Over | ／o／ | ／o／ | ／o／ | V |
| telephone | ／o／ | ／o／ | ／o／ | $\square$ |
| Not | ／0／ | ／o／ | ／o／ | 区 |
| All | ／0／ | ／o／ | ／o／ | 区 |
| Old | ／o／ | ／o／ | ／o／ | V |
| won＇t | ／o／ | ／o／ | ／o／ | V |
| Lot | ／0／ | ／o／ | ／n／ | 星 |
| Of | ／3／ | ／o／ | ／o／ | 区 |
| combination | ／3／ | ／a／ | ／a／ | 区 |
| Of | ／0／ | ／o／ | ／o／ | 区 |
| Strong | ／0／ | ／o／ | ／o／ | 区 |
| Also | ／0／ | ／o／ | ／0／ | m |
| information | ／0／ | ／0／ | ／a／ | m |
| Lots | ／0／ | ／o／ | ／o／ | 区 |
| Of | ／0／ | ／0／ | ／o／ | 区 |
| Exposure | ／o／ | ／o／ | ／o／ | $\square$ |
| Spoken | ／o／ | ／o／ | ／o／ | V |
| Progress | ／0／ | ／o／ | ／o／ | 区 |
| Or | ／0／ | ／o／ | ／o／ | 区 |
| Only | ／o／ | ／0／ | ／0／ | V |
| don＇t | ／0／ | ／0／ | ／o／ | V |


| Participant 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Sentences |  |  |  |  |
| all scholarship not want call of promised caught coat bought boat |  |  |  | 区 <br> 区 <br> 区 <br> ， <br> 『 <br> m <br> 区 <br> 区 <br> ， <br> 区 <br> $\square$ |
| Free speech |  |  |  |  |
| of of Bio－Medical Bio－Physics for from Bio－medical so Bio－physics so of Georgia | ／o／ <br> ／0／ <br> ／0／ <br> ／0／ <br> ／0／ <br> ／0／ <br> ／0／ <br> ／o／ <br> ／0／ <br> ／0／ <br> ／0／ <br> ／0／ | ／o／ <br> ／o／ <br> ／o／ <br> ／o／ <br> ／0／ <br> ／o／ <br> ／o／ <br> ／o／ <br> ／o／ <br> ／o／ <br> ／0／ <br> ／o／ |  |  |

Legend

| Agreed and Correct pronunciation | $\boxed{\square}$ |
| :---: | :---: |
| Agreed and In－correct pronunciation | $\boldsymbol{x}$ |
| Disagreements（Misses） | $m / 3$ |


| Participant 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
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| Passage |  |  |  |  |
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| Noticed | ／0／ | ／0／ | ／0／ | V |
| From | 10／ | ／0／ | ／a／ | 边 |
| Because | 10／ | ／0／ | ／o／ | 区 |
| Of | 10／ | 10／ | $1 \mathrm{~L} /$ | ，m |
| Foreign | 10／ | ／0／ | ／o／ | 区 |
| Only | ／0／ | ／o／ | ／0／ | m |
| Reported | ／0／ | ／0／ | ／0／ | V |
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| Older | ／0／ | ／0／ | ／0／ | V |
| Common | 10／ | ／o／ | ／o／ | 囚 |
| Most | ／0／ | ／o／ | ／o／ | $\square$ |
| For | 10／ | 10／ | ／o／ | 边 |
| From | 10／ | 10／ | $1 \mathrm{~L} /$ | ，m |
| Also | ／0／ | ／o／ | ／o／ | 囚 |
| Or | 10／ | ／0／ | ／o／ | 区 |
| Over | ／0／ | ／o／ | ／o／ | V |
| telephone | ／0／ | ／o／ | ／0／ | V |
| Not | 10／ | 10／ | 10／ | V |
| All | 10／ | ／3／ | ／3／ | V |
| Old | ／0／ | ／0／ | ／0／ | V |
| won＇t | ／0／ | ／o／ | ／o／ | 『 |
| Lot | 10／ | ／0／ | ／o／ | 区 |
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| Also | 10／ | ／0／ | ／o／ | 区 |
| information | 10／ | ／o／ | ／o／ | 区 |
| Lots | 10／ | ／o／ | ／o／ | 区 |
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| Exposure | ／0／ | ／o／ | ／o／ | $\square$ |
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| Participant 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Sentences |  |  |  |  |
| all <br> scholarship <br> not <br> want <br> call <br> of <br> promised <br> caught <br> coat <br> bought <br> boat |  | ／3／ <br> ／o／ <br> ／0／ <br> ／3／ <br> ／o／ <br> ／2／ <br> ／0／ <br> ／0／ <br> ／o／ <br> ／0／ <br> ／o／ | $\begin{aligned} & \mathrm{lo} / \\ & \mathrm{lo} / \\ & \mathrm{lo} / \\ & \mathrm{l} / \\ & \mathrm{l} / \\ & \mathrm{l} / \\ & \mathrm{o} / \\ & \mathrm{lo} / \\ & \mathrm{lo} / \\ & \mathrm{lo} / \\ & \mathrm{lo} / \\ & \mathrm{lo} / \end{aligned}$ | V <br> 回 <br> $\nabla$ <br> $\square$ <br> 囚 <br> 断 <br> 区 <br> 明 <br> ■ <br> 囚 <br> V |
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Legend

| Agreed and Correct pronunciation | $\nabla$ |
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| Agreed and In－correct pronunciation | 区 |
| Disagreements（Misses） |  |


| Participant 3 |  |  |  |  |
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| Because | ／0／ | ／o／ | ／o／ | 区 |
| Of | ／0／ | ／0／ | ／2／ | 退 |
| Foreign | 10／ | ／0／ | ／0／ | 区 |
| Only | ／0／ | ／0／ | ／0／ | $\square$ |
| Reported | ／0／ | ／o／ | ／0／ | $\square$ |
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| Older | ／o／ | ／o／ | ／0／ | $\nabla$ |
| Common | 10／ | ／o／ | ／0／ | 区 |
| Most | ／o／ | ／o／ | ／o／ | $\nabla$ |
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| Lot | 10／ | ／o／ | ／0／ | 区 |
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| Strong | 10／ | ／o／ | ／0／ | 区 |
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| Exposure | ／0／ | ／o／ | ／0／ | $\square$ |
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| Participant 3 |  |  |  |  |
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| Sentences |  |  |  |  |
| all scholarship not <br> want <br> call <br> of <br> promised <br> caught <br> coat <br> bought <br> boat |  |  | ／o／ ／o／ ／o／ ／o／ ／o／ ／o／ ／o／ ／o／ ／o／ ／3／ ／o／ | 区 <br> 瑯 <br> 区 <br> 区 <br> 『 <br> m <br> 囚 <br> 区 <br> V <br> 测 <br> V |
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| of <br> of <br> for <br> so <br> electronic <br> of <br> so | ／o／ <br> ／0／ <br> ／0／ <br> ／ $0 /$ <br> ／0／ <br> ／0／ <br> ／0／ | ／o／ <br> ／o／ <br> ／o／ <br> ／o／ <br> ／o／ <br> ／o／ <br> ／o／ | $\begin{aligned} & \mid \Lambda / \\ & / \Lambda / \\ & / \mathrm{o} / \\ & / \mathrm{o} / \\ & / \mathrm{o} / \\ & / \mathrm{L} / \\ & / \mathrm{o} / \end{aligned}$ | m <br> ans <br> 区 <br> V <br> 囚 <br> 测 <br> マ |

## Legend

| Agreed and Correct pronunciation | $\boxed{ }$ |
| :---: | :---: |
| Agreed and In－correct pronunciation | 区 |
| Disagreements（Misses） |  |

## APPENDIX D: THE VOWEL PHONES OF SINHALA

Vowel phonemes of Sinhala


## APPENDIX E: STUDENT DIAGNOSTIC PROFILE

## LEARNER VARIABLES <br> Background

Name: ------------------- Age: Length of residence:
Native Language: ------------------------ Other languages spoken:
Education:
Occupation:
Is English used in the workplace?
Frequency of use of English: $\qquad$
English Proficiency Level: Basic $\square \quad$ Intermediate $\square \quad$ Advanced $\square$
Standardized test scores:

## General speaking habits

a. Clarity: very intelligible - - - - - unintelligible
b. Speed: very fast - - - - - very slow
c. Loudness: easily heard - - - - - - difficult to hear
d. Breath groups: too many pauses - - - - - - not enough pauses
e. Eye gaze: appropriate - - - - - - inappropriate
f. Fluency: fluent - - - - - - halting
g. Voice: pitch range too narrow? voice too nasal?

## Intonation

a. Statement (final rising-falling)
b. Yes-No question (final rising)
c. Wh-question (final rising)
d. Tag questions (final rising and final rising falling)
e. Series (non-final rising)

## Stress and rhythm

a. Word level stress
b. Phrase/sentence level stress
c. Linking
(Firth, S., 1992, p. 182)

## APPENDIX F: THE ACTIVITIES

## Day 1, Lesson 1

## Activity I

Listen to your recording in the cassette. Then compare it with the recording by the teacher.
Identify the differences between the two recordings

## Activity II

## The vowel chart

This shows the part of the tongue (front, central, back) involved and how high the tongue is (high, mid, low) when the vowel sounds are produced.

## Sri Lankan English vowel chart

|  | Front | Central | Back |
| :---: | :---: | :---: | :---: |
| Close | $\begin{aligned} & \text { /i/, /ii/ } \\ & \text { /I/, /II/ } \end{aligned}$ |  | /u/, /uu/ <br> /v/, /vu/ |
| Half close | /e/, /ee/ |  | /o/, /00/ |
| Between half close \& half open /Mid | /ع/, /ع์/ | /ə/, /əә/ | 10/, 100/ |
| Between Half open \& open | /æ/, /ææ/ | $/ \Lambda /, ~ / \Lambda \Lambda /$ |  |
| Open |  | /a/, /ao/ |  |

(Gunesekera, 2005, p. 117)

Mid-back vowel /o/
Low-back vowel/o/

Ex: /o/ as in 'coal'
$/ 0 /$ as in 'call'

## Activity III

Practice the following minimal pair words with you teacher

## Oh/Or

Hole /hall

Horse/ hose
Walk/woke

Pole/Paul

Low/law
Morning/mourning

## Day 2, lesson 2

## Activity 1

Which word do you hear??
Listen to the list of words read by the teacher and underline the correct picture.


## Activity II (Pair work)

Listen to the following sentences read by your partner and underline the correct answer in your worksheet.

Student A

1. Tell John it is snowing.
2. Did you take care of the notes?
3. I am going to see the movie " Border"
4. I am attending an oral communication class
5. Could you give me a loan please?
6. clause / close
7. law/ low
8. want / won't
9. bone / born
10. pause / pose

## Student B

1. Joan / John
2. notes / knots
3. Border / Boarder
4. oral / aural
5. lawn / loan
6. Remember to close all the windows before you leave.
7. She is a law student.
8. I won't come to the party tomorrow.
9. My best friend was borne in Switzerland.
10. Do not pause unnecessarily

## Activity III

Read the following words and audio record them with the number.

1. clause 11. Joan
2. notes 12. phone
3. Border 13. hole
4. aural 14. call
5. loan 15. bowl
6. law 16. fawn
7. want 17. horse
8. bone 18. naught
9. pose 19. oral
10. close 20. hall

Now listen to the recording of your teacher. Can you hear any differences?

## Activity IV

Listen to you teacher and indicate whether the vowel sound in bold and italicized words are $/ \mathrm{o} /$ or $/ \mathrm{o} /$. The first one has been done for you

1. I hope she will call me today. /o/
2. I have to submit the report by Thursday. $\qquad$
3. You can find the book behind the box $\qquad$
4. She will be graduating next Fall. $\qquad$
5. He is interested in quality control. $\qquad$
Now work with a partner. Do not forget to switch roles at the end of the first five sentences.
6. Look at this gold chain. It is beautiful! $\qquad$
7. My niece loves to eat yoghurt. $\qquad$
8. I have to go to the post office. $\qquad$
9. I have never seen such a naughty child. $\qquad$
10. Who is the owner of that shop? $\qquad$
11. Don't talk to me again. It is over! $\qquad$
12. This skirt is too short, don't you have anything long? $\qquad$
13. Do not speak of old people like that! $\qquad$
14. I broke my leg when I was in college. $\qquad$
15. The coastal area is so nice. $\qquad$

## Day 3, lesson 3

## Activity 1 (pair work)

Read the following dialogue and identify the correct pronunciation of the words that contain the phoneme /o/. Discuss the accurate pronunciation of the selected words with your partner.

John : Hey, how are you? What a lovely coat! Where did you buy it?
Claudia: Oh I bought from Ross. By the way did you bring my notes?
$J$ : Oh no I totally forgot.
C: How could you do this? You always forget!
J: I am sorry. You know what I am going home right now. I'll return your notes before 4.
C: you better
Now read and act it with your partner

## Activity II

Watch the two video clips and write the words that contain the two vowel sounds we have been learning so far. Now rehearse and practice the pronunciation with your partner.

## Video 1

Transcript (provided by the teacher once the students write the words)
Employee 2: I am sorry! Does this smoke bother you?
(Smoking)
Chandler: No, no I smoked for years, then I quit. I can't remember why. You are not allowed to smoke in the office alright?

Employee 2: yes in Oklahoma it is illegal to smoke in an office with 15 people or less. Would you like one?

Chandler: alright, look look. I don't smoke anymore but if the rest of you want to light up go ahead it is fine.
(Everybody starts smoking)
Chandler: So you all smoke then!! (www.youTube.com)

## Video 2

Transcript (provided by the teacher once the students write the target words)

## Rachel has been offered a job in Paris

Ross: alright we'll work it out
You are sure this is what you want?
Rachel: I think it is
Phoebe: what's going on?
Rachel: I got a really incredible job offer.
Phoebe: hey, great! Good for you!
Rachel: It's in Paris
Joey: what? No, no, no, no, no. Too much is changing ok. First Phoebe getting married congratulation! And then these two are moving to a stupid house in stupid suburbs

Rachel: Well you guys this is really really important to me. It means a lot if you could try to get on board

Phoebe: of course we can. Congratulations! Joey!
Joey: no, no my hugs are reserved for people staying only in America (www.youTube.com)
Now read the dialogues with your partners.

## Activity III

Guided practice with feedback
Student A
(Pair work) Fill in the empty boxes by asking your partner for the missing information. In turn your partner will ask question about what is missing in her/his worksheet. You should ask the questions like the following:
'What is the word in box A2?'
A
B
C
D

1
2
3
4

|  | Galle* | code |  |
| :---: | :---: | :---: | :---: |
|  | Long | cord | Rot |
| Pole | Wrote |  | Bowl |
| Or |  |  | Rode |

*One of the main cities in Sri Lanka.

|  | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: |
|  | Knot |  |  | Oh |
| 2 | Pour |  |  | Rot |
|  |  |  |  | Bone |
|  |  |  | Bowl |  |
|  |  |  | Caught | pause |
|  |  |  |  |  |
|  |  |  |  |  |

Now compare the answers with your partner.

Day 4, lesson 4

## Activity 1 (group work)

Read the following strips and make a story.
Suddenly she felt bored and lonely. She wanted to talk to someone.
Suddenly an old man, wearing an old coat appeared behind the trees.
It was a beautiful morning! Joan was walking among the flower beds.
Joan thought for a moment. "No go away or I'll call the police"

You are so cruel. If you do not give me the flowers I will turn you into a frog! And the old man took a gold magic stick from his pocket.

Don't be so haughty young lady. I just want some flowers. I will give you this gold coin instead.
Joan was startled. "What do you want?" She almost screamed.
I am sorry but I can't let you mess with the flowers. Joan said her body shaking with anger
"No, please don't" Joan screamed from the top of her voice. She woke up at once and was so relieved to know that it was just a dream!

Don't be afraid. I mean no harm. But I need to borrow some flowers from your lovely garden. They are for my daughter.

Now read the story to the class.

## Activity II (Group work)

Read the following situation and brainstorm a list of words that contain the vowel sound we have been learning so far. Now write a telephone conversation and present it to your class.

You are a graduate student who recently arrived in the US. Your academic program commences next week and you are still looking for an apartment. Telephone the Housing agency to inquire about a suitable apartment that is close to your college.

## Activity III

Listen to the words you recorded on day 2 of our class. Do you think your pronunciation has improved since then? Now rerecord the 20 words and assess your own pronunciation. Are you satisfied with your pronunciation of the two vowel sounds $/ \mathrm{o} /$ and $/ 0 /$ ?


[^0]:    ${ }^{1}$ Lippi-Green, 1997, p. 64

[^1]:    ${ }^{2}$ The terms "Not pot English and the Lower Prestige Dialect (LPD) of Sri Lankan English will be used interchangeably throughout the paper
    ${ }^{3}$ A Sinhala term meaning backwardness pronounced as/godeenəs/

[^2]:    ${ }^{4}$ The present study is limited to the investigation of the vowel production by Sinhala speakers of English.

[^3]:    ${ }^{5}$ Sinhala term meaning backward or rural

