Teaching the Dutch how to pronounce English

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The Dutch overestimate their English speaking skills. Their pronunciation is not always convincing, and certain pronunciation mistakes are easily recognized as being typical for Dutch speakers of English. Although intelligibility cannot exist without adequate pronunciation, teaching English pronunciation at Dutch secondary schools is often absent from the EFL teaching curriculum. Focusing on the most prominent pronunciation difficulties, often caused by the mother tongue (L1), will benefit the non-native speaker’s pronunciation and intelligibility. In order to provide teachers with a time-efficient approach to teach English pronunciation, preliminary research is needed to identify the most prominent error types in the English pronunciation of secondary school pupils and bachelor students in the Netherlands. Research shows that fifty percent of the subject group makes seven types of pronunciation mistakes in more than fifty percent of the cases that such mistakes could be made. The conclusion discusses a general approach for addressing the kind of pronunciation problems we identified.

Keywords: Pronunciation Teaching; Intelligibility; Accent; Teaching Design

1. Introduction

In a globalizing world it is important for non-native speakers of English to be able to communicate in English successfully. Native and non-native teachers who teach English as a foreign language are able to influence the learner’s English pronunciation. Teaching pronunciation, however, is not as self-evident as teaching grammar or idiom. Although many course books offer a wide range of communicative exercises, sections dealing with pronunciation issues are very often missing. Apparently, it is left to the teacher to decide how much time and effort will be devoted to teaching pronunciation. Because of the time-consuming aspect of finding the right materials and didactical teaching approach, teaching pronunciation is often neglected. However, a speaker making grammatical mistakes but speaking with a good pronunciation is more intelligible than a speaker making no grammatical mistakes but with poor pronunciation skills (Jenkins, 2000). So why do we teach grammar but neglect to teach pronunciation in EFL lessons?
With a time-efficient approach dealing with the most prominent pronunciation error types, very often caused by phonological interference (mother tongue or L1) teachers will be able to improve students’ English pronunciation. This cannot be done by banning L1 from the EFL-classroom, but by using L1 pronunciation to compare with L2 in order to establish and teach the phonemic and articulatory differences between the two. This article inventories the most prominent pronunciation mistakes made by Dutch learners of English and discusses some ideas of how education may help to avoid such mistakes.

2. Background

In the 1940s, 1950s and into the 60s there was no question about the importance of teaching pronunciation as part of EFL teaching. It was considered to be as important as teaching e.g. correct grammar. This changed in the late 1960s, through the 70s and into the 80s, when teaching pronunciation lost ground in EFL teaching and even disappeared from many curricula altogether. Changing models for EFL teaching left no room for traditional pronunciation teaching, as communicative skills and authentic learning activities dominated the new teaching approaches. Teaching pronunciation using ‘meaningless’ drill exercises were no longer popular and many linguists believed that acquiring a near-native accent should neither be a teacher’s nor a student’s aspiration.

Joan Morley (1991, p.487) indicates how throughout the decade of the 1970s some linguist rekindled the interest in teaching pronunciation and that:

...the modest number of pronunciation-focused papers of the 1970s was followed in the 1980s by a significant increase in both journal articles and teacher resource books, clearly a reflection of renewed interest in pronunciation teaching principles and practices.

As traditional pronunciation teaching strived for “perfect pronunciation” or near-native pronunciation, the new focus was on intelligibility and the communicative value of pronunciation. For non-native speakers to sound native-like seemed an unrealistic goal for EFL teachers and students, even a tedious and time consuming one, very often with an unsatisfactory outcome for both teachers and students. Scovel (1969) and others believed it to be impossible for non-native speakers to acquire a near-native like accent. Leather (1983) even stated that non-native speakers with a near-native accent were even negatively looked upon by some native speakers and uses Christophersen’s (1973) description of one possible native speaker’s reaction to too-perfect pronunciation in an L2 speaker may be that of “a host who sees an uninvited guest making free with his possessions” (p. 199). Scovel’s and Christophersen’s observations seem to contradict each other as the latter
claims that it is possible for non-native speakers to achieve a near-native accent which some native speakers might look negatively upon.

Native speakers, however, also seem to add social value to a convincing pronunciation. Morley (1987/1988) expresses concerns that some non-native speakers’ pronunciation might cause a social disadvantage. Beebe (1978) observed that “the very act of pronouncing, not just the words we transmit, are an essential part of what we communicate about ourselves as people” (p. 121). She stated that native speakers often describe non-native speakers’ pronunciation as sounding cute, comical, incompetent, not serious or childish. That indicates that a non-native speakers’ pronunciation influences the credibility of the speaker. Indeed, according to Shiri Lev-Ari and Boaz Keysar (2010), native speakers consider trivia statements less trustworthy when uttered by non-native speakers with an accent. The effect, they show, is not due to prejudices native speakers may have against foreigners.

2.1. EFL teaching in the Netherlands

The European Union researched the English pronunciation skills of non-native speakers of English in 2006 and found that the Dutch overestimate their English speaking and pronunciation skills. In other European countries 20 to 30 per cent of the participants stated that they could easily communicate successfully in English. For the Dutch 80 to 90 per cent claimed to be able to successfully communicate in English. The same research shows that 25 per cent of Dutch businesses disadvantage themselves because of poor pronunciation skills in business negotiations.

English in secondary education in the Netherlands is a compulsory exam subject at all levels. Although many students have already gained some skills in English e.g. by watching TV, listening to music and playing online computer games with people from all over the world, secondary education treats English as a new foreign language for all students to be studied. So the basis for good pronunciation skills is to be established here. Research shows that “those learners, who show positive feelings towards the speakers of the new language, tend to develop more accurate, native-like accent” (Kenworthy, 1987, p.8). Dutch students are already surrounded by the target language from a very young age onwards, and the students’ needs are very specific and do not so much ask for more attention to suprasegmental details. It is the phonological interference (L1) causing most of the pronunciation difficulties. The amount of exposure to the target language, the learners’ age and the attitude towards the target language and L1 all play an important role in pronunciation teaching.

Teacher training colleges in the Netherlands use Received Pronunciation (RP) or General American (GA) as a reference for pronunciation teaching. Although
there is no prescribed standard accent for teachers to use and teach in EFL lessons, most Dutch teachers of English have acquired a British accent themselves, based on the International Phonetic Alphabet (IPA) for RP. Depending on background and interest, a Dutch EFL-teacher might or might not aim for a standard accent for his/her own pronunciation. The teacher might have more of a “World English” accent, highly intelligible but with phonological interference or a mixture of e.g. American, British and L1 phonemes.

Non-native teachers of English might find it difficult to detect certain pronunciation mistakes in their students’ pronunciation. Although they are able to hear that certain sounds are off, it is quite difficult to determine the exact nature of the mistake. Brief and practical theoretical background information about certain aspects based on the principals from the field of phonetics is necessary. Works like An introduction to Phonetics (Birjandi & Salmani-Nidoushan, 2005), The book of pronunciation (Marks & Bowen, 2012), Sound foundation (Underhill, 2005) and English pronunciation for student teachers (Gussenhoven & Broeders, 1997) all provide the theoretical background and even add proposals for a practical pedagogy. Although phonetics is part of every curriculum at teacher training colleges in The Netherlands, in the first author’s extensive experience as a teacher and a teacher trainer, it is noticeable that the previously gained knowledge might partly disappear in the actual practice of teaching English, especially when teaching pronunciation is not really being dealt with when teaching English in EFL-lessons. Sometimes, when non-native teachers of English leave the academic environment, they lose the need to use their best academic English themselves in a classroom situation. For non-native speakers of English it is important to keep on practicing and using the English language.

In the Netherlands, there is little pressure for teachers to prove they are involved in a continuous professional development process. It is, however, amazing to hear how many Dutch EFL-(student) teachers achieve a near-native pronunciation, contradicting some linguists’ belief that a near-native pronunciation for non-native speakers of English is unachievable. Received Pronunciation has been the standard accent used throughout the various levels of the Dutch educational system since the beginning of EFL-teaching. Nowadays it is often claimed that traditional RP should be regarded as the classic example of a prestige accent used by a minority of people spread over England, who belonged to the educated and well to do class. Collins & Mees (2013) describe a more neutral type of modern British English which lacks obvious local accent features and which is used by the educated middle and younger generation speakers in England, who have a pronunciation which cannot be pinned down to a specific area. They call it non-regional pronunciation (NRP). Jenkins (2000, p. 18) suggests treating Received
Pronunciation or General American not as the accepted standard for teaching pronunciation, but as a reference for non-native learners of English. Having the same reference would also result in a better intelligibility amongst the various non-native speakers of English with a different L1 background. In this research we do not choose RP as the standard, but as a reference for teaching pronunciation.

2.2. Objectives and main research question

In this paper the authors study the pronunciation skills of Dutch speakers of English at secondary schools and higher education. In particular, we address the question of which mistakes in pronunciation are not or insufficiently being dealt with when teaching English as a Foreign Language (EFL lessons) in secondary education in the Netherlands. Also, we aim to establish the most frequently occurring error types in the English pronunciation of secondary school pupils (from now on referred to as students) and college students (who study anything but English), with RP used as a reference.

Plenty of works offer a wide range of error analyses (e.g. The Phonetics of English and Dutch, Collins & Mees 2003) but as pronunciation is not part of many EFL curricula at secondary schools in the Netherlands, time efficient strategies are of utmost importance in order to stimulate EFL teachers to adopt pronunciation teaching and make it part of their EFL teaching. That is why we attempt to reduce the wide range of possible pronunciation difficulties Dutch speakers of English might face to a confined set of mistakes made by the majority of speakers. Such a confined set would provide teachers with a starting point for teaching pronunciation that would allow them to focus on the most beneficial aspects for the students within the limited teaching time available. Ultimately, the authors aim to achieve a better English pronunciation for students once they leave secondary school. In this paper the main research question is:

Which pronunciation mistakes are still prominently present in students’ English pronunciation after two years of secondary education and after finishing secondary education in the Netherlands?

3. Method

3.1. Determining typical mistakes Dutch speakers of English make

The phonemes used in the International Phonetic Alphabet (IPA) for RP and the generally accepted rules of phonemes in contact, used in the field of phonetics, as described in English pronunciation for student teachers (Gussenhoven & Broeders, 1997) and Sound Foundations (Underhill, 2005 ) are used as a reference to determine whether a sound has to be counted as a
mistake or not. A format (Appendix A) is used in which 20 error type categories are identified and clarified. These 20 mistakes are the most commonly made mistakes in the first Pronunciation & Fluency test by first year student teachers of English at the Fontys University of Applied Sciences (unpublished research). Most of these students have a B2 entry CEFR level (Common European Framework of Reference for Languages), which is their secondary school level after passing the final exams. The typical mistakes Dutch speakers of English make are also described in A Teacher’s Guide to Interference (Swan & Smith, 2001). For the Pronunciation and Fluency test an evaluation format (Appendix B) is used which offers a classification of the mistakes Dutch speakers of English tend to make. From that classification the 20 most commonly made mistakes by first year students of English during their first pronunciation test at the Fontys University of Applied Sciences are used to set up the observation protocol.

3.2. Subject group and data

The corpus of the student-based data for this research was collected from sound samples of 40 third-year secondary school students following a bilingual course (CLIL lessons and more EFL lessons), 40 third year secondary school students following a regular course at the same secondary school, with regular EFL lessons and 52 students from various parts of the Netherlands, following a bachelor course at various universities of applied sciences throughout the Netherlands. Of the total of a 132 recordings 20 recordings were randomly chosen and fully analyzed according to the observation protocol (Appendix C). From the bachelor students 6 were randomly chosen, from the bilingual course students 7 and from the regular group 7. Then 5 more randomly chosen samples were analyzed to see whether the outcome of now 25 recordings would not deviate too much form the data of the first 20 recordings. The 5 extra recordings included sound data from 1 bachelor student, 2 students from the bilingual course and 2 from the regular group.

Students who did not have the Dutch language as their mother tongue but English (regardless of the accent) and students who studied English at university level, were excluded from participation. Data provided by bilingual students with English as one of their mother tongues, with a consistent native-like non-RP English accent and with another mother tongue than Dutch, was also excluded. So, the data comes from Dutch students with Dutch as their mother tongue who study or studied English as a foreign in secondary education only.

Secondary school students’ parents were informed by means of a letter that recordings to collect data for a research were going to take place and that for their child participation was voluntary. None of the students had to be
excluded because parents denied access to their child’s data.

The research studies the typical error types Dutch speakers of English make which are not specifically addressed in secondary education in The Netherlands. For this reason students of the highest level within the Dutch secondary educational system (those being prepared for university) were chosen to participate. Together with the bilingual group, with enforced English (more English lessons and other subjects in English) they are trained to achieve the highest level of English in the Dutch secondary educational system (CEF B2). It is likely that the mistakes these students make, will also be present in the pronunciation of students studying at lower levels. This was not checked, however. The bachelor students were added to find out which mistakes are still present after passing the final exams at secondary school. To make sure that the mistakes are not based on regional phonetic interference, the bachelor student participants were chosen from various regions in The Netherlands.

The Observation Protocol (Appendix C) was specifically designed for this research. It produces quantitative and qualitative data. For the quantitative analysis the frequency of the various error types per participant were logged, resulting in an individual profile per student. The number of individual occurrences for each error type was totaled for all 25 students in order to find out which error types occur most frequently in the subject group as a whole.

The qualitative data records the pronunciation level of the student. It is related to the frequency of occurrence of each error type.

The data was gathered from two reading tasks: (i) an assignment asking students to read 13 isolated sentences which were specifically designed for this purpose to make sure the error type categories were covered (Appendix D), (ii) an assignment asking students to read a story in English (Appendix D) which is often used in the field of phonetics to practice pronunciation, as it contains many of the difficult RP phonemes for EFL- learners. The 20 error types selected as indicators are represented in Table 1.

<table>
<thead>
<tr>
<th>Vowels</th>
<th>Vowels: diphthongs</th>
<th>Consonants</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel too short</td>
<td>au, aw, oʊ</td>
<td>r - colouring</td>
<td>no linking - r</td>
</tr>
<tr>
<td>e, e /æ</td>
<td>øu, oː / ɔː</td>
<td>final lenis = fortis</td>
<td>no gradation</td>
</tr>
<tr>
<td>æ, e</td>
<td>eɪ, eː / ai</td>
<td>θ, t, s, f</td>
<td>no liaison</td>
</tr>
<tr>
<td>ι, ə / œ / y</td>
<td>ai, aj / œj</td>
<td>ι, ə / œ</td>
<td>no aspiration / p t k /</td>
</tr>
</tbody>
</table>
3.3. Data collection

Secondary school students were told weeks in advance that their pronunciation performances were to be recorded for the purpose of research. Teachers of English were asked to show (not practice) the two reading tasks in class so that the students knew what the recordings were going to be about. On 13 September 2013 students were asked to spread over two big rooms where 22 assistants (third year student-teachers of the Fontys University of Applied Sciences) were waiting for them with the tasks and a recording device (voice recorders on iPhones, iPads, laptops and smartphones). The students were asked to sit with one of the assistants. The tasks were explained once more and the students were allowed to read through the tasks and ask questions before the recording session started.

The assistants were asked not to interrupt the speaker during the recording session. Once the recording session was over the assistants were asked to send the sound file to the principal investigator’s email address in order to make sure that all the data was immediately and safely stored.

The OP was used to register the occurrence of the preselected error type categories. In the two reading tasks parts of the text where the occurrence of a particular error type might be expected were underlined and numbered so that the PI and two assistant testers analyzed the same number of error type items. The recordings had to be analyzed for all of the 20 error type categories for each individual student. It was possible to stop the recordings as many times as necessary in order to establish whether a pronunciation mistake was made. The assistant testers were instructed to write down the number of mispronounced words for each error type and they were asked to accept only correct RP pronunciation. A format with error type descriptions were given beforehand. For each category a new sheet with words and phrases underlined was designed to make it possible to write down the number of the pronunciation mistakes for a preselected set of words or phrases for each error type. Per error type, therefore, a fixed but differing number of mistakes could be made by the students (see Appendix C for further details).

After a test run of 4 students who were all individually analyzed by the principal investigator and his two assistant testers, the three investigators compared notes. In an effort to make sure no systematic differences would exist between their individual analysis practices the results were discussed and, where needed, the distinction between RP and non-RP pronunciation was further detailed. Summed over all 20 error types, 779 mistakes could be made per student, totaling 19475 possible mistakes for the subject group of 25 as a whole.

Column 2 of Table 2 shows that the absolute number of possible mistakes per
error type varied from 10 for $\theta$ is $t$ and 100 for final lenis is fortis. It also shows that the number of times a student could make a particular mistake varies per category. Therefore, in order to determine the most frequently occurring error types, the observed frequency of occurrence of an error type was weighed by the frequency of the possible number of occurrences. The resulting percentage per error type category was used to establish the most frequently occurring error types in the pronunciation of the subject group.

Table 2

<table>
<thead>
<tr>
<th>rank</th>
<th>error type</th>
<th>No of students making particular error</th>
<th>% of particular errors made</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$\delta = d$</td>
<td>22</td>
<td>85.0</td>
</tr>
<tr>
<td>2</td>
<td>no aspiration /p t k/</td>
<td>20</td>
<td>82.7</td>
</tr>
<tr>
<td>3</td>
<td>$\alpha = e$</td>
<td>20</td>
<td>69.8</td>
</tr>
<tr>
<td>4</td>
<td>$\Theta = t, f, s$</td>
<td>19</td>
<td>75.6</td>
</tr>
<tr>
<td>5</td>
<td>no linking $-r$</td>
<td>19</td>
<td>65.2</td>
</tr>
<tr>
<td>6</td>
<td>no gradation</td>
<td>16</td>
<td>63.3</td>
</tr>
<tr>
<td>7</td>
<td>$\omega = o:$</td>
<td>13</td>
<td>54.0</td>
</tr>
</tbody>
</table>

4. Results

Initially the data of a group of only 20 students was analyzed. Then the analyses of 5 more students were added to measure if they affected the final outcome. There was a difference of only 1.7 % between the subject group’s averages of both measurements: the average for the first 20 was 43.5% and for the total 25 it was 45.2%. There was no change in the order of the final 7 categories ending up as the categories with the most occurring mistakes in percentages. Only two categories were really influenced. Those error types hardly ever occurred with most students but when a student pronounced mistakes in these categories, they would automatically go wrong at every possible occasion and by that causing a huge effect on the total outcome. One student of the added 5 made two of those error type mistakes and changed the outcome of two categories which scored low with most students. Since this was an obvious anomaly, it was decided, therefore, that a sample of 25 sufficed as an estimate of the frequencies of occurrence of the most frequently occurring error types.

Figure 1 displays the difference between the analyses of first 20 students and the analyses with 5 students added. The percentages are weighed by dividing, per error type, the number of mistakes made by the total number of errors possible to be made.
Figure 1. First 20 students vs. 5 students added.

Figure 2 shows the percentages of mistakes the subject group made, giving an insight into the order of the error type categories from the error type category with the most scored mistakes to the error type with the fewest frequently made mistakes in percentages for the subject group.

Figure 2. Weighed percentages of the mistakes made by the subject group.

In this research an error type category is considered to deserve more and specific attention in secondary education if 50 % of the subject group makes
mistakes in more than 50% of the possible mistakes to be made in this category. The results show that 7 error categories meet this requirement (Figure 2). For further research and for the development of a teaching approach for pronunciation in EFL lessons in secondary education it is important to establish which error types are predominant.

5. Discussion

Considering the finding that pronunciation and intelligibility are intertwined and that a near-native English accent enhances the non-native speaker's credibility (Jenkins, 2000), the authors consider devoting time to teaching pronunciation at secondary school level is both essential and worthwhile. In a globalizing world we want our students to sound as intelligible and credible as possible and teaching pronunciation is one of the main tools to achieve this. Pennycook (2011, cited in Reid, 2012, p.32) argues:

From its wide use in many domains across the world, or the massive efforts in both state and private educational sectors to provide access to the language, to its role in global media, international forums, business, finance, politics and diplomacy, it is evident not only that English is widely used across the globe but also that it is a part of those processes we call globalization.

As teaching a foreign language involves more than only focusing on pronunciation, it is important to be time-efficient and deal with those issues in a classroom situation that would correct the most frequently occurring mistakes made by most students. Our research data shows that 7 error types occur in more than 50% of the cases in which the error could be made, for more than 50% of the subject group (Figure 2). Using a teaching approach which focuses on improving students' pronunciation skills with regards to the error types in Table 2 would mean improving the pronunciation of the majority of students in a classroom situation. In all the error type categories at least 84% of the students would benefit from such an approach. For most of the categories this percentage is even higher and in categories with rank number 1 and 2 even 100% would benefit.

However, when teaching secondary school students there is a limit to what one can expect students to comprehend in terms of theory and even physical pronunciation skills. By simply providing theory or practicing the error types mentioned in Table 2 students and teachers might waste valuable time on certain aspects which cannot be significantly improved in the time given for studying English at secondary school level. That is why the authors would advise not to take up error type nr. 6, no gradation, in an approach that tries to improve secondary schools RP-pronunciation skills.
Underhill (2005) points out that neither an academic approach for training teachers nor the repetition approach for training students seemed effective or enjoyable when teaching pronunciation and he claims that teachers and students need direct and conscious experience of experimenting with the muscles and breath energy in their vocal tract. Hismanoglu (2004) indicates that in recent years focusing the physical and visual aspects of pronunciation, e.g. movement of the lips, tongue and jaw, has become more popular.

For the remaining six error type categories a physical approach would be advisable as you cannot improve your pronunciation by studying theory alone. The physical approach of teaching pronunciation requires teachers to transfer the existing theory on phonetics (RP) into a physical approach, explaining and showing place and manner of articulation, describing the movements of articulators, pointing out how phonemes behave in contact with other phonemes and how certain phonemes behave in certain positions. We doubt whether it is useful to teach phonetics (and the IPA symbols) at secondary school level, but do consider it to be of great importance to devote time to actually teaching pronunciation (which does not equal teaching speaking skills or practicing communicative exercises) just like time is devoted to e.g. grammatical and idiomatic aspects of a language. Pronunciation can be taught as an isolated part in EFL lessons, but there is no point in isolating pronunciation from teaching grammar or idiom or ignore it while reading texts or practicing speaking. The need for an authentic learning approach is evident as teaching pronunciation only by means of pre-structured pronunciation assignments will cause a teacher to miss out on all the opportunities to practice pronunciation in day to day classroom discourse while teaching the various other skills of the target language. Every context is valuable and suitable for teaching pronunciation.

6. Conclusion

Our research only focused on typical mistakes students with Dutch as their mother tongue make while speaking English. Teachers should be aware of the fact that with a varied population of students with various mother tongues, the origin of certain pronunciation mistakes might differ because every L1 (mother tongue) influences the pronunciation of L2 (target language) in its own specific way. In Teaching and Researching English Accents in Native and Non-Native speakers (Waniek-Klimczak & Shockey, 2013) various research papers show typical pronunciation difficulties for Vietnamese, Polish, and French-speaking learners of English. A teacher’s guide to interference and other problems (Swan & Smith, 2010) focuses on major problems of pronunciation and other errors with chapters covering Korean, Malay/Indonesian, Polish and many more language backgrounds. It is worthwhile for a teacher to study typical mistakes made by certain L1
speakers to find out about the influence of that L1 on the pronunciation of, in this case, English. Indeed, although the details of approaches to remedy typical L1 language mistakes for a particular L2 will no doubt depend on the specific L1-L2 combination, we are convinced that the overall features of any such approach will be similar. Our future research will be devoted to outlining such an approach, in our case for the L1-L2 combination of Dutch and English.

Therefore, first of all further research on the effects of teaching pronunciation using a physical approach is needed. That is, it is particularly important to design an approach helping teachers to avoid having to deal with difficult theories on phonetics and pronunciation in a classroom situation. The focus should be more on the physical aspects of pronunciation. For students this means learning by doing. In his First Principles of Instruction, David Merrill has shown that having students apply themselves what they have learnt is a powerful learning strategy (Merrill, 2007). An attractive e-learning environment could allow students to work on their pronunciation outside of the classroom. As an added benefit, this set-up gives the teacher the opportunity to deal with pronunciation without using time-consuming pronunciation activities in class. It also helps to differentiate between students with various needs. Students can work on their pronunciation at their own pace and hand in their final pronunciation task when they are satisfied with their results.

Second, Hismanoglu (2004) states that reflective pronunciation teaching and learning has gained importance. For this recorded sound date of students’ speaking performances is used in order to create individual pronunciation portfolios. So one could help students to avoid typical L1 mistakes for some L2 by stimulating them to record their speech and then learn from their own pronunciation by listening to tapes of their speech. Self-monitoring leads to self-correction. Portfolios, furthermore, help students and teachers to gauge progress (and lapses, as the case may be).

Third, EFL teachers would benefit from a teaching design focusing on the principles of scaffolding, breaking up the learning into increasingly more difficult tasks while being engaged in whole tasks. Such an approach is described by Van Merriënboer and colleagues as the 4C/ID model (Van Merriënboer & Kester, 2005). For each part a specific structure or method should be provided. To scaffold pronunciation an approach should start with specific sound data focusing on phonemes in isolation, then on the use of these phonemes in smaller context (words, phrases or sentences) before using authentic contexts. Students could model phonemes by listening to and watching videos. The videos would provide not only sound data but also show the articulatory aspects of pronunciation. As already suggested, it is worthwhile for students to record their own pronunciation performances in a
sound-portfolio.

Fourth, teachers do not only need specific theory on the phonetic aspects of pronunciation, but also a clear strategy to implement the theory in a practical approach. Teachers should be aware of which articulators to use when producing certain phonemes. Details depending on the L1-L2 combination, they should be able to explain what happens in the mouth, where to put the tip, blade or front of the tongue, how and where to compress or release the air, when lip-rounding is important, when to voice a phoneme and all that without using terminology like “fortis and Lenis”, “plosives and fricatives” or “alveolar and bi-labial”. Another difficult aspect of teaching pronunciation is that sometimes it is hard to detect specific mistakes in fluent speech. Teachers need to develop a trained ear to be able to detect mistakes and isolate phonemes. By determining specific error type categories and focusing on these difficulties when students speak, it will be easier to isolate phonemes and correct mistakes. As pronunciation has been neglected over the last decades, also in pre-service teacher training, an approach to in-service training of teachers and their continued professional development needs to be developed, if pronunciation is to become part of the teacher’s standard skill set.

However, one need not wait until these researches have been conducted and teaching designs have been developed. At a practical level, pronunciation could already be dealt with whenever specific mistakes occur. In particular, one should avoid waiting until students have studied some grammar and idiom and are able to communicate by means of using basic idiom and grammar. There is no point in accepting certain mistakes for a year or two and then try to correct them. It will be more difficult for a student to get rid of a certain mistake in pronunciation than to study the right way of producing a phoneme from the start. So from day one teachers should adopt an approach that deals with specific difficulties (in the case under investigation six specific error types most Dutch learners of English struggle with), explaining the physical aspects of these phonemes in isolation and in contact with other phonemes. After that, they will only need to point out these mistakes whenever they occur, in whatever part of the EFL lesson. Instead of never correcting pronunciation mistakes for the sake of maintaining a safe environment, it is wiser to always correct pronunciation mistakes (so that students know it is always an issue). The only exception would be in situations for which an uninterrupted production of speech is necessary.
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References


Lev-Ari, S., & Keysar, B. (2010). Why don’t we believe non-native speakers? The influence of accent on credibility. The University of Chicago, Chicago IL, USA.


Appendix A: Explanation Error Types

1 Vowels too short

Dutch speakers of English (DSE) have the tendency to round off word endings which have a lenis consonant with a fortis sound, e.g. "pub" (b is p), "understand" (d is t), "is" (z is s) and "have" (v is f). This influences the length of the preceding vowels in that the words become short and "sharp". Some DSE also tend not to produce the right length for tense vowels and diphthongs, so words like "barn", "so", "mind" etc., end up being rather short and sometimes without much of a diphthong quality.

2 /e/ = /e /æ/

This is the tendency to use the Dutch /æ/ as in "koffie zetten" for RP /e/. The jaw position is too close creating a "higher" sounding /e/-sound. Some Dutch speakers of English do the opposite. They open their jaw too much, making more of an /æ/-sound. They lose the distinction between /e/ and /æ/; so there is no difference between the pronunciation of e.g. "bad" and "bed" anymore.

3 /æ/ = /e/

This is the tendency not to make the distinction between /æ/ and /e/. Words like "understand", "hand", "can", all have the /e/-quality. So again they do not make a distinction between words like "bad" and "bed" or "marry" and "merry".

4 /ɔ/ = /ɔ/, /o/, /ɔ/, /ɔ/

This is the tendency of DSE to, whenever they see a [u] symbol, representing RP /ɔ/ in a word like "but" or "fun", move the phoneme /ɔ/ towards a Dutch vowel quality /ɔ/ as in the Dutch word "kus" (kiss). When they see an [o] symbol, they tend to move towards the Dutch /ɔ/ as in the Dutch words "korn" (corn), "bot" (bone), or towards RP /ɔ/ as in "hot" and "not". Some DSE turn /ɔ/ into /o/ opening their mouth (jaw position) too much, making the vowel in the word "but" sound more like the vowel in "bath" and "burn" sounds like "barn".

5 /ɔ/ = Dutch /ɔ/ or RP /a:/ / ɔ /

The RP phonemes /ɔ/ and /a:/ are quite close to the AN phoneme /ɔ/. However, for the Dutch phoneme /ɔ/ the lips arerounded more. DSE who are aware of the difference between the RP phonemes and the Dutch one often fear rip-rounding and tend to spread their lips in order to make the difference between the RP sounds and the Dutch one distinguishable. With spread lips /ɔ/ often ends up sounding like /ɔː/ or /ɔː/ so that "hot" might end up sounding like "heart" and "hot" like "nut".

6 /u/, /u/ = Dutch /u/ [ō]

The Dutch phoneme /u/ differs from RP /u/ in that in the jaw position the Dutch sound is more close, creating a "higher" /u/ quality. So the Dutch vowel in the word "boek" (book) does not sound like the English vowel in the word "boot". Furthermore many DSE produce RP /u/ and /u/ alike, making no distinction between the vowels in the words "book" and "boot" or "stood" and "stew".
7 /au/ = /aw/, /au/

Especially Dutch speakers who use an AN (Algemeen Nederlands = Standard Dutch) accent or one close to it, have a tendency to round their lips too much at the beginning and the end of /au/ when speaking English, so that the starting point of the diphthong is more like /o/ instead of /a/ and the end more like a /w/. This because of the Dutch phoneme /au/ in a word like "nou" (now) is close to RP /au/ in a word like "now", but more rounded from the start of the first element of the diphthong and closer in jaw position, and more rounded, at the end of the second element of the diphthong.

8 /au/ = /o/, /a/

Some DSE deal with the [a] symbol as if it were the Dutch [oo] in a word like "kook" (cook), ignoring the diphthong quality in words with RP /au/ ("so", "no", "go" and "over"), giving these words a heavy Dutch accent.

9 /eu/ = /e/, /a/

Some DSE tend to forget about the second element of the diphthong /eu/ so that the phoneme ends up sounding like an elongated Dutch [ee] as in the Dutch word "week" (week). So RP "wake" sounds like AN "week". A few DSE might have adopted some sort of local British pronunciation of /eu/, opening the jaw too much for the first element of the diphthong and making RP "day" and "die" sound more or less alike.

10 /ai/ = /aj/, /a/

Because the rounding off of the Dutch diphthong /ei/ as in the Dutch word "ijs" (ice), which happens with the jaw moving toward a very "close" position, creating a very "high" /i/ quality and a /j/ -like ending, some DSE copy these features while pronouncing RP /ai/ so the ending is too Dutch in quality. Some even add lip-rounding to the first element, causing a word like "buy" to sound more like "boy" with a Dutch /i + j/ ending.

11 RP /æ/ is GA /æ/

Some DSE are not aware of typical Americanisms in their RP pronunciation. Using words like dance and chance, pronounced as /dants/ and /fants/ in the same sentence with words like "can't" and "enhance" pronounced as /kænt/ and /enhæns/, causes inconsistency. Creating awareness of certain characteristics of the various generally accepted accents (in this case RP and GA) might take away these inconsistencies.
12 R-colouring

Many DSE have a tendency to pronounce an /ɔː/ (as in "ear") quality in words like "word", "heard", "car" and "computer" because they detect a visual 'r' in the coda of a word. Sometimes it is an American 'r' we hear or something close to it. The tip of the tongue curls back a bit instead of keeping the tongue flat in order to lengthen the preceding vowel quality. Every movement towards the r is off in RP. In a word like "floor" a student should produce a longer vowel quality (/flɔː/) and avoid curling the tip of the tongue so an r-quality is produced because we see an r on paper which would be pronounced in the coda of a Dutch word like "vloer" (floor) or "kaart" (map, card).

13 Finals lenis = fortis

Many DSE round off words ending in a lenis sound (pub, understand, is, and, gave, have, as, understand, has, with, girls, boys etc.) with a fortis sound. This also influences the length of the preceding vowels or voiced portions. It is important to be conscious of the difficulties when the following word starts with a voiceless phoneme, as assimilation (e.g. have + to or these + ships) causes lenis endings to become fortis (/hæfə/ + /nu:/ becomes /hæfənu:/ and /θiz/ + /ʃips/ becomes /θizʃips/) in fluent speech. However, if the DSE decides to pause in between two of those words, they should clearly produce the lenis sound.

14 /θ/ = /d/

The vast majority of Dutch students speaking English do not distinguish between /θ/ and /d/. Most of them are not even able to produce the correct version of /θ/. Physical explanation is necessary! What happens in the mouth? Where to stick your tongue etc. As there are so many easy grammatical words in almost every sentence (the, that, this, those, there etc.) it is important to improve a student's awareness of the clear distinction between "that" and "dad", "other" and "udder" and the English word "mother" should not sound like the Dutch word "modder" (mud).

15 /ʃ/ = /ʃ, /s, /θ/

The vast majority of DSE does not distinguish between /θ/ and /ʃ, /s/ or /θ/. Most of them are not even able to produce the correct version of /θ/. Physical explanation is necessary! What happens in the mouth? Where to stick your tongue etc. Making sure a student can distinguish between the bold and underlined sounds in words like

"face" /feɪs/ and "faith" /feɪθ/;

"team" /tiːm/ and "theme/θiːm/

"free" /friː/ and "three" /θriː/

is very important in order to improve an RP accent.
16 /v/ = /f/

Some DSE tend to turn a final lenis /v/ into a Fortis /f/ in words like “have”, “gave”, “of” etc. and sometimes even initial /v/ turns into a Fortis /f/ in words like “very” (sounding like “ferry”) or “vast” (sounding like “fast”). This happens because of the way the Dutch initial v in writing, especially in AN, is pronounced like the voiceless f (“veel vaker” sounding like [feel faker]) and a final v in Dutch words does not even exist. Seeing an f on paper in Dutch words, is automatically an f in pronunciation, but in RP an f in the word “of” on paper is a v in pronunciation. When final v turns into f it automatically shortens the preceding vowel or voiced portion.

17 no aspiration after initial /p/, /t/, /k/.

This is something most DSE are not aware of. After initial /p, t, k/ they immediately voice the following vowel. Adding the extra puff of air after initial /p/, /t/, /k/ (or as some linguists put it, delay the voicing of the vowel after initial Fortis plosives) increases the RP –quality of pronunciation. It is not only word initial /p, t, k/, but also syllable initial. So in a word like “potato” every Fortis plosive needs aspiration.

18 No linking - r

Some DSE who are aware of the fact that in RP the r in the coda of a word should not be pronounced, tend to keep this up when linking - r is needed. DSE who do pronounce the r in the coda of a word, often produce linking - r without realising it. However, when they produce a pause in between the two words which should be linked with linking r, and the first one ends with a clear r in pronunciation, but they do not really link the two words, it is still considered to be off.

19 no gradation

DSE are not aware of some words having a strong and a weak form. They aren’t even aware of it being present in their mother tongue, but use it automatically. When not using it in the L2, they will sound too formal. Even if they read “he is” they should pronounce “he’s” and “of” is almost always pronounced /əv/ instead of the strong form /əf/.

20 no liaison

When a word ends with a consonant and the next one starts with a vowel, DSEs tend to put in a glottal stop right before pronouncing the word starting with a vowel, instead of connecting the words as if the last consonant is the first consonant of the word starting with a vowel. So instead of “uncle Eric” pronounced as /ʌŋkəl ɪrɪk/ it will sound like /ʌŋkəl ʔɪrɪk/, which is the typical Dutch way of pronouncing words starting with a vowel in Dutch (hij ‘eet een appel). Every word starting with a vowel, not linked to the preceding word as if the final consonant of the preceding word is the first of the word starting with a vowel, and every time the glottal stop is heard before the initial vowel, is considered to be off in this research.
# Appendix B: Evaluation Format

## Oral Communication Evaluation Form

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Pronunciation</th>
<th>Topic</th>
<th>Fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowels:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] rising too short (= final fortis)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] one</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] schwa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] [a:]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] [o:]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] [u:]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] incorr./no lip.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] % too open/e/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diphthongs:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X]</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>[X] r-colouring</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>[X] final lens = fortis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] lens cs. = fortis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] fortis cs. = lenis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[X] clear /l/ = dark</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>[X] dark /l/ = clear</td>
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<td>[X]</td>
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<tr>
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<td>[X]</td>
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</table>

### Notes
- Vocabulary
- Syntax
- Inflection
- Strategy
- Confidence
- Subject grasp
- Clarity of comm.
- Sophistication
- Question tags missing
- Hesitations
- Stuttering
Appendix C

Observation Protocol: Type of mistake and the number of types any one student could make that mistake in the first two tasks; column 3 was used to list the total number of mistakes a specific student made for a particular error type; column 4 was used to calculate the number of mistakes made relative to the total number of mistakes any individual student could possibly make for a particular error type; the relative frequency is expressed as a percentage.

<table>
<thead>
<tr>
<th>error types</th>
<th>possible mistakes</th>
<th>mistakes reading</th>
<th>percentage</th>
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<td></td>
</tr>
<tr>
<td>e = e /æ</td>
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<td></td>
</tr>
<tr>
<td>æ = e</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a = a / o / y</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o = oɪ / oɪ / a</td>
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<td></td>
</tr>
<tr>
<td>u / uɪ / oe</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>au = aw / āu</td>
<td>20</td>
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<td></td>
</tr>
<tr>
<td>əː = əɪ / əɪ</td>
<td>27</td>
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<td></td>
</tr>
<tr>
<td>er = eɪ / aɪ</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>æ = æɪ / æɪ</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RP /æ/ is GA /æ/</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>r -colouring</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>final lenis = fortis</td>
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<td></td>
</tr>
<tr>
<td>ð = d</td>
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<td></td>
</tr>
<tr>
<td>θ = t, s, f</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>v = f</td>
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<tr>
<td>t k/</td>
<td></td>
<td></td>
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<td>Sum total</td>
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</table>
Appendix D: Assignment 1 and 2

ASSIGNMENTS RESEARCH PRONUNCIATION
13 SEPTEMBER 2013
INSTITUTION X3, THE NETHERLANDS

INTRODUCTION:
Dear student,

Today you will be working on 2 assignments which you have to record in English. The recordings will be used in a research on pronunciation skills in secondary education.

- In assignment 1 you have to read 13 sentences aloud.
- In assignment 2 you have to read the text “Arthur the rat” aloud.

You are allowed to read through the tasks before you start the recording. As soon as you start recording you are not allowed to stop in between the assignments.

When ready you can send your recording to (Email author).

INSTRUCTIONS:
- Start the recording and answer questions 1 to 5 first.

1 What is your name?
2 Which form are you in?
3 How old are you?
4 What is your mother tongue?
5 What is your nationality?

Continue with the two assignments which you will find on the next page.

ASSIGNMENT 1

Read the following sentences aloud:

1. They never think about anything that the author throws at them in these books.
2. Read those great romantic novels about cars and motorbikes produced in the Far East.
3. The kids skipped classes, took some cash from mother’s purse and bought ten computer games.
4. Is aunt Ellen as old as uncle Eric?
5. She bought a pup and went to meet some friends in the pub whom she bored with her talks about dogs.
6. You should never put your books in the wet boot of a car.
7. But it’s stunning to see him run like a bunny.
8. Taking a bath before going to a dance enhances your chances of getting a date.
9. I can’t understand that those married people set a bad example.
10. Bending the rules never leads to better results, said Freddy.
11. I embrace their ideas but don’t see how such a load of work can be done in a year.
12. The Hulk lost his temper and lifted a lorry with his left hand.
13. He has never been to France and would like to go there as soon as possible.

(continue with assignment 2 on the next page)

ASSIGNMENT 2
Read the following text aloud:
Arthur the rat.

Once there was a young rat named Arthur, who could never make up his mind. Whenever his friends asked him if he would like to go out with them, he would only answer, "I don't know." He wouldn't say "yes" or "no" either. He would always shirk making a choice.

His aunt Helen said to him, "Now look here. No one is going to care for you if you carry on like this. You have no more mind than a blade of grass."
One rainy day, the rats heard a great noise in the loft. The pine rafters were all rotten, so that the barn was rather unsafe. At last the joists gave way and fell to the ground. The walls shook and all the rats’ hair stood on end with fear and horror. "This won’t do," said the captain. "I'll send out scouts to search for a new home."

Within five hours the ten scouts came back and said, "We found a stone house where there is room and board for us all. There is a kindly horse named Nelly, a cow, a calf, and a garden with an elm tree." The rats crawled out of their little houses and stood on the floor in a long line. Just then the old one saw Arthur. "Stop," he ordered coarsely. "You are coming, of course?" "I'm not certain," said Arthur, undaunted. "The roof may not come down yet." "Well," said the angry old
rat, "we can't wait for you to join us. Right about face. March!"

Arthur stood and watched them hurry away. "I think I'll go tomorrow," he calmly said to himself, but then again "I don't know; it's so nice and snug here."

That night there was a big crash. In the morning some men—with some boys and girls—rode up and looked at the barn. One of them moved a board and he saw a young rat, quite dead, half in and half out of his hole. Thus the shirker got his due.

You can stop the recording now and send your sound file to: [email address]

Thank you for your participation!