Pronunciation Problems of PRC Students

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This paper examines the pronunciation problems of 40 PRC students from the north-eastern, central and south-eastern parts of China. Transcriptions were made from video-taped oral short talks done by the research participants. The most difficult English phonemes for PRC students are consonants such as / l/, /r/, / θ / at the beginning of words and / η / at the end of words. The least difficult were / \int /, /t \int /, /p/, /b/, /t/ and /k/. The findings show that students with strong Chinese dialects such as those from Central and North-eastern China tend to reproduce some Chinese sounds in English pronunciation. This observation of pronunciation problems was substantiated by 20 CELC tutors who have taught PRC students. This paper concludes with some tips on teaching pronunciation to students from China.

Introduction

The Centre for English Language Communication has been teaching the Intensive English Course for pre-matriculation students from the People's Republic of China since 1992. This is a bridging course to raise their English proficiency to the standard that will equip them for university education. The English lessons cover mainly the four skills of listening, speaking, reading and writing over a period of 6 months, roughly 600 hours in all. One of the main problems with these EFL students is their speaking skills. At the beginning many students could hardly utter an intelligible sentence in English because of their poor pronunciation; sometimes it was their lack of fluency as well as grammatical accuracy. More often it was poor pronunciation that hindered communication between them and non-PRC people. While non-PRC teachers at CELC are usually able to understand their PRC students' spoken English fairly accurately, they are still unable to comprehend their students fully because this "unintelligibility" arises from the interference of students' mother tongue affecting the pronunciation.

Most research shows that there is learner's native language interference in the target language leading to difficulty in pronunciation (Wu, 1993; Flege, 1980). Other research observes that learners utter English phonemes by searching the corresponding sound in their native language first, and then substituting the target sound with it (Hockett, 1972, Lado 1957). Li (1998) explored the common errors made in pronunciation of English consonants used in American English by Chinese learners in Taiwan. This study, on the other hand, sets out to identify the specific pronunciation problems, vowels as well as consonants, of Chinese learners from certain regions of China, particularly those who have less exposure to the West and media, because this is a less studied area. It concentrates only on the pronunciation of phonetics; it will not consider other speaking skills such as intonation, pitch, stress and diction, which require another study. This study is also not concerned with carrying out a thorough contrastive analysis of the interference of L1 on L2, the theory of which has been expounded by Lado (1957). Instead, it presents an overall view of the pronunciation problems of the Chinese learners at CELC from the observation of its teachers and to suggest teaching methodology that could be useful and motivating, both to learners and teachers from this centre and elsewhere. It is hoped that EFL teachers would become more aware of the pronunciation problems of PRC students particularly those from the Central and Northern regions of China, understand the causes of these problems and help their students improve their pronunciation.

This paper has two parts: the first identifies the most common pronunciation difficulties peculiar to students from different provinces of China and discusses possible reasons for them, the second recommends tips for EFL teachers to make teaching pronunciation interesting and effective for EFL adult Chinese learners.

Research Set-Up

Participants

Number of Students: 39 Female students: 12 Male students: 27

20 students were from the 1995-96 group

19 students were from 1997-98 group

Number of students from:

Central China (Hubei, Henan, Sichuan): 16 North-eastern China (Beijing, Shandong): 6 Central East China (Shanghai, Hangzhou): 5 South-eastern China (Guangzhou, Shenzhen): 12

Procedure

Two videotaped oral presentations of 39 PRC students who took the Intensive English course in 1995-96 and 1997-98, were transcribed. The oral presentations were individual tasks and each student spoke on general topics relevant to the China scene, such as "A Chinese Festival, My Hometown, Environmental Problems, High School Education in China", and so on.

To verify the findings a set of questionnaires was given to 20 tutors from CELC who have taught either the PRC Intensive English Course or the Postgraduate Intermediate English Course for students from the PRC.

Findings

In general, the students from Central China such as Hubei, Henan and Shandong have the worst pronunciation problems in terms of intelligibility while those from the coastal cities such as Shanghai, Guangzhou and Beijing have the least, and are more fluent as they may have more exposure to Western media.

The following results were transcribed from 2 videotaped presentations of the PRC students' short talk lasting about 10 minutes for each speaker (see Appendix 1).

Consonants

Rank in descending order starting with the most difficult:

/r/ and /l/	Really, truly, row, Larry, rely, lorry, rail, literary, regal
/r/	Crew, grow, fright, rather, grass, rot, row, frog
/1/	Boil, spoil, furl, pull, all, full, call, gall, goal, tail
/0/	Thin, three, thigh, truth, thug, breathe, seethe, bath

/ŋ/	Sing, clung, stung, ring, thing, wing, sling, gong
/ʃ/	Shop, she, shall, show, short, shine, she'll, short, sheet
/t∫/	Rich, fetch, cheer, much

Consonants in pairs:

Rank in descending order starting with the most difficult:

/k/ and /g/	Lack-lag, rick-rig, flock-flog, clue-glue, crumble-grumble	
/f/ and /v/	Fine-vine, few-view, a life-alive, rifle-rival, leaf-leave	
/t/ and /d/	Tin-din, ton-done, latter-ladder, writer-rider	
/p/ and /b/	Pet-bet, park-bark, a brooch-approach, pride-bride, wrap it-rabbit	

The following results are the responses of CELC teachers who have taught PRC students.

Consonants

Rank in descending order starting with the most difficult:

/0/	Thin, thigh, truth, breathe, bath
/r/ and /r/ & /1/	Crew, fright, rather, rot, really, lorry, rely, literary
/1/	Soil, furl, load, let, tail, all
/ŋ/	Sing, clung, thing, sling
/ʃ/	Shop, she, show, short, sheet
/t]/	Rich, fetch, cheer, much

Consonants in pairs:

Rank in descending order starting with the most difficult

/k/ and /g/	Lack-lag, rick-rig, flock-flog, clue-glue
/f/ and /v/	Fine-vine, few-view, a life-alive, rifle-rival
/t/ and /d/	Tin-din, ton-done, latter-ladder, writer-rider
/p/ and /b/	Pet-bet, park-bark, a brooch-approach, pride-bride

Most PRC students have difficulty with /r/ and /l/ especially students from Southern China. Although 69.2% of CELC teachers noted that $/\theta$ / is the most difficult from their teaching experience, 43.3% of CELC teachers ranked /r/ and /l/ in isolation as well as /r/ and /l/ occurring in polysyllabic words, as the second most difficult. It is particularly problematic in polysyllabic words

containing both /r/ and /l/ where words are mispronounced. A word like generally is reduced to a two-syllabic word - gen-li or threesyllabic - genrali. Where /r/ and /l/ occur in two-syllabic words many Chinese students will drop the /l/. For example, world becomes word, curl becomes cur, results becomes resuts. 42% of CELC teachers agree strongly with this observation. Northern Chinese students can produce /r/ fairly accurately when it appears in one-syllabic words. This is because in the Beijing Chinese accent, an /r/ sound, almost similar to the English /r/, (except that the tip of the tongue does not roll back as much as the English /r/) is often tagged on the end of a word such as "wan" ("play" in Chinese) which is pronounced as "wan-r" (in Chinese text this symbol [JL] is tagged on to the Chinese character as an indication that the word must be read with a "r" sound). It is not surprising that the Northern Chinese students have less difficulty with onesyllabic or two syllabic words ending with /r/ and /l/ as in girl, furl, curl, hurl. This observation is borne out by some CELC teachers who said that Northern Chinese are seemingly used to the /r/ in their own native dialects. The Beijing students, for example, because of their familiarity with the /r/ sound, sometimes put in extra /r/ sound in most words containing either /r/ or /l/. For instance, everyone becomes everyone, usually becomes urrually. This habit is noted by 50% of CELC teachers. unconsciously done as the Beijing Chinese accent has numerous /r/ sounds where the tip of the tongue is curled up at the alveolar ridge.

Generally speaking, most Chinese students have a problem with words containing /r/ and /l/ whether in two-syllabic or polysyllabic words whereas they have less difficulty in pronouncing monosyllabic words containing either /r/ or /l/. However, there may be exceptions to this observation such as the students from Henan and Hubei (see *Specific Pronunciation Problems*). The /l/ at the beginning of mono-syllabic word is fairly easy as in Mandarin Chinese there is a "le" sound, so transferring this sound to /l/ is not very difficult. /l/ at the end of words such as *tail, fail, mall, nail, tell*, are less accurate for some students who tend to produce the /r/ sound instead because they cannot stop rolling back their tongue. CELC teachers (57%) agree strongly with this observation. /r/, on the other hand, is more difficult, particularly at the beginning of words, for example, *roar, run, rob, ring, read*. /r/ at the end of words is easier as in *boar, oar, hair*.

Again, it seems that Chinese students, other than those from Northern China, have become used to the [JL] tagged at the specified Chinese characters in reading aloud practice in schools. This may explain why many Chinese learners have not much difficulty in pronouncing words ending with /r/.

The second most difficult sound for most Chinese learners is the fricative $/\theta$ / either at the beginning or end of words. CELC teachers consider this sound to be the most difficult for their PRC students because there is no such sound in Mandarin Chinese, (Li, 1998: 640) and perhaps because many students are shy of putting the tip of their tongue between the teeth to produce the soundless but aired $/\theta$ /. They tend to substitute the sound $/\theta$ / for /s/. Thus thought becomes sought, theorem becomes serum, think becomes sink, and so on because there is a si in the Chinese pinyin transcript but not the voiceless $/\theta$ /. Or, instead of substituting $/\theta$ / for /s/, they substitute $/\theta$ / with a /t/ sound, as in thank-tank, thin-tin. This observation is in agreement with that of Chang (1987: 225). Teaching Chinese learners to produce the voiceless $/\theta$ / sound is difficult but can be done if they were shown the correct position of the tongue and given a lot of practice.

The other phonetic sound that is generally difficult for Chinese students is the nasal /ŋ/ because again, there is no such sound in Chinese. Raymond Huang who studied the pronunciation problems of Cantonese speakers, attributes the failure of Chinese learners to pronounce /m/, $/\eta$ / with the proper length because these sounds are extremely short in Chinese (Huang, 1966). Our Chinese students normally substitute /ŋ/ with /n/ as in sing-sin, rang-ran. Long-sounding words are usually difficult for Chinese students because Chinese words do not have such drawn-out sounds compared to English. 35% of CELC teachers do not agree with this observation. This may be because /ŋ/ and /n/ were not taught as paired sounds, as in, thin/thing and sin/sing and these paired sentences which I used in class: "He doesn't want to sin. He doesn't want to sing", or a more difficult exercise like this, "Have you any thin silver? Have you anything silver?"(Barnard, 1979: 70). The problem with $/\eta$ / is more obvious when paired with $/\eta$ /, as /n/ is a stressed fricative, requiring some guttural effort but on its own poses little problem for our Chinese students. Generally, most Chinese students from any part of China have a serious problem with simple consonants such as /ŋ/ at the end of words, but when they do get the /ŋ/ right they can run into trouble pronouncing words like *singer* which becomes *sing-ge*. This is a common problem with the postgraduate students from foreign universities not only from China but also Chinese students from the ASEAN regions because there is no such sound in the Chinese language.

Another fricative which can be difficult for some students is /[/ which is substituted by the /s/ sound, as in she-he, shop-sop. shoe-sue. CELC teachers do not think that / [/ is easy (28.5%) while 35% disagree that there is any substitution of /s/ for / \(\int \). They think Chinese students cannot do she, for example, because in Chinese, the pronouns, she and he sound identical. Thus they believe Chinese students say he when they mean she and do not automatically transfer the /[/ to /s/ as in shop-sop, shoe-sue. In general, / [/ looks difficult to teach to some Chinese students but this problem can be overcome because in Chinese Mandarin there is a sh sound which is found in words such as shi or shu in pinyin. This observation is also made by Chang (1987: 226) who explained that /dx/, /ts/ and /s/ are "distantly similar to a group of three different Chinese consonants". Although the Chinese tones are different (there are four tones in Mandarin) getting them to produce the Chinese sounds first and then keeping the shape of the lips (rounded and compressed) to produce the English sound is possible.

Less problematic in terms of accuracy are consonants such as /t/ and /d/, /f/ and /v/, /g/ and /k/, /p/ and /b/ although the difficulty varies from student to student. Mostly, they have a noticeable problem with these consonants which appear at the end of words. Problematic words are rope-robe, cup-cub, nip-nib, heat-heed, fright-fried, slack-slag, flock-flog, leaf-leave, a life-alive. Some of these problems are explained by Wu (1993) who said that in Mandarin Chinese, there are no voiced stops such as /b/, /d/, and /g/. Chinese students from Central China tend to give an extra sound to words ending with these consonants.

Problematic Vowels

Long sounds pose some problems for some learners, in particular /i:/ and /i/ as in sheep: ship, /o:/ as in soil, door, four, and

/uə/ as in, tour, poor, which have no equivalent in the Chinese language. They tend to pronounce /i/ and /i/ so that one hears only ship/ship and not sheep/ship. These vowels are problematic because the contrast between /i/ and /i:/ has no equivalent in Chinese. /ɔ:/ is given two sounds instead of one, as in soil-er for soil.

Another noticeable habit among Chinese students is their habit of deleting or adding a syllable from two-syllabic words or more than two-syllabic words. This observation is in agreement with the findings of Li (1998) on a study of pronunciation problems of Taiwanese students. The most common pronunciation problem with the CELC students from Central China is adding another syllable to a one-syllabic word. What they are doing is to voice these consonants: /d/, /b/, /t/, /d/ and /k/. Thus words such as and, should, like, pack, must, but, job, sound like: and (de), should (de), like (ke), pack (ke), must (te), but (te), job (ber). Two-syllabic words such as almost becomes al-mot-ter, college becomes co-llege, knowledge becomes know-led-ge, subject becomes sub-jet-te, clothes becomes clothe-es, village becomes vi-lla-ge and so on. The Shandong students also have the same problem. It therefore sounds strange when these students read a sentence containing and the which is read as and (de) the, that is, three syllables. The reason for this problem could be incorrect instruction in China, which teaches putting a voiced sound in voiceless consonants, and aspirating where aspiration is not necessary.

Polysyllabic words can have at least one syllable deleted by Chinese students. The above example, *generally*, is a classic example because of the problem with /r/ and /l/ and sometimes with /n/ in the word. Such an example is *revolution* which becomes *rev-lu-tion*, *everyone* becomes *ev-one*, *everything* becomes *ev-thing*, *normally* becomes *norm-ly*, *dormitories* becomes *dorm-tories*, *introduce* becomes *int-duce*, and so on. Possible explanations for such mispronunciation are careless reading, unfamiliarity with the vocabulary, the difficulty with words containing the problematic consonants (discussed above) and perhaps poor listening skills.

Specific Pronunciation Problems

Substituting /n/ for /l/ sound or vice versa. This is very common among students from Central China. Thus technology becomes tech-lo-logy, lunar become lu-lar, underlying becomes under-nai-ing, lack of law becomes nack of naw, recognised becomes recoglised, nowadays becomes low-a-days, natural becomes latural, another becomes an-lather, and so on. Unlike the Northern Chinese students, some of these students tend to substitute /r/ for /l/ as in grow -glow, rather- lather, arrangement - alangement, career - caleer or Korea and so on.

It becomes complicated when students have to pronounce polysyllabic words containing both /n/ and /l/ as in analytical which becomes a-la-ti-cal dropping one syllable or, it sometimes gets pronounced as a-na-na-ti-cal, keeping all the syllables but pronouncing only the /n/ sounds. The cause of this problem could have arisen from the way these students were taught Chinese pronunciation. One of our PRC teachers explains that in certain parts of China, Sichuan for example, the /l/ in the pinyin transcript is pronounced as /n/. Thus a word like "dragon" which is transcribed as long will be pronounced as nong by these students. I tested this out with more Chinese words such as nai (endurance) which was pronounced as *lai*, and *nuan* (warm) pronounced as *luan* instead. However, not all Chinese words transcribed with /n/ are pronounced with the /l/ sound and vice versa. But because of fossilised learning some Chinese students somehow transferred the /l/ and /n/ sound in Mandarin to most English words containing /l/ and /n/.

An interesting observation is that the pinyin /r/ which used to be pronounced as /y/ by the older Chinese (PRC and overseas Chinese) does not present the same kind of pronunciation problem for our students. For example, rong yi meaning "easy" in pinyin used to be pronounced as yong yi before pinyin was invented, and rang (let) used to be pronounced as yang; similarly, yong, meaning "military" is now rong. The author Jung Chang (which is the anglicised transcription of Chinese sounds) of the "Wild Swans" fame used the old transcription of yong though now she is known as Zhang Rong by Chinese-speaking people.

The Southern Chinese students seem to have the least problems with English pronunciation. However, their main error is in substituting /v/ for /b/ as in activity - actibity and /v/ for /w/ as in: everywhere for everywhere. 69% of CELC teachers agree that Chinese students confuse /v/ for /w/ and vice versa. A possible explanation for this is that both vowels sound alike. Otherwise their problems are quite common with most foreign learners of English, for example, advertisement-ad-ver-tice-ment, relatives-ri-latives, vacation-vocation, and enunciation problems such as like- lie (k missing), climbing -cli-bing (m missing) class -cass (l missing).

Mispronunciation such as these can be attributed to either incorrect teaching in China, or a lack of awareness of how important good enunciation is in making a difference to the meaning of words. Sometimes even when learners become aware of the errors, learn to identify them and to correct themselves, they may slip into the old habit of the mispronouncing. But in an English-speaking environment like Singapore the pre-matriculation students from PRC need to be more accurate in their speaking skills to communicate in a multi-cultural society.

Teaching Applications

To help these students improve their speaking skills, it is necessary to start with pronunciation skills. Teaching pronunciation strategies will vary depending on the types of students we have but CELC teachers have indicated that some of the following strategies may be useful:

- Using similar sounds in Mandarin wherever possible
- Teaching placement of tongue, lips, teeth, etc
- Providing self-access to listening tapes
- Training students to listen and identify own errors or errors of other students
- Providing exercises in tongue-twisters
- Providing articulation exercises using funny poems, children's rhythms & rhymes
- Encouraging students to listen to the radio, for example, BBC or watch TV
- Scheduling more classroom practice in minimal pairs monitored by teacher.

The kind of classroom practice and the teaching strategies used in the classroom will depend very much on the oral proficiency of the students and their specific problems in pronunciation as well as their motivation. Those who started learning English earlier may have an advantage as they would have been attuned to the sounds of the English language for a longer period and may learn to correct their own mistakes earlier. On the other hand, those who started late, such as postgraduate students some of whom started learning English only in high school or university, will certainly have more problems and will need more time.

Generally, it is observable that all Chinese learners of English, regardless of whether they are competent or weak in enthusiastic about skills. are improving pronunciation. Thus the above recommended teaching strategies of pronunciation should be stimulating and interesting for such learners. However, teachers who have a knowledge of Mandarin sounds will have an advantage over those who do not as this knowledge does help to teach Chinese learners to transfer some of the Mandarin sounds to English. For instance, the pinyin shi can be used to teach / [/. Understanding the causes of poor or incorrect pronunciation is important too and when teaching Chinese learners. a knowledge of not only Mandarin sounds but Chinese culture, though not necessarily essential, can help the teacher decide the best teaching methodology. For example, classroom practice in minimal pairs monitored by the teacher may work better instead of one-to-one teaching involving individual student with the teacher, which may intimidate some students. Culturally, Chinese learners are perhaps more familiar with large group teaching with little interaction between teacher and students thereby diffusing class attention on individual students. Knowing this will help teachers to decide the best kind of language activities in class. Teaching the placement of tongue, teeth, lips, etc to produce the correct sounds may be more difficult with Chinese learners as some may feel embarrassed or shy about performing such actions. However, once this cultural barrier is overcome (when the students are more familiar with the teaching styles in our English classes) an effective way of teaching pronunciation is to videotape the students presenting an oral talk, either in an informal or formal situation. Though the purpose of a videotaped oral presentation is basically to teach good delivery techniques it can be effective in identifying the

pronunciation problems of individual students who can then see and hear for themselves why they may not sound intelligible.

Another helping factor is the duration of the pronunciation lesson. The lack of time devoted to teaching this skill is certainly a problem in achieving success in teaching pronunciation. Thus with English proficiency courses that span 12 weeks it is necessary to concentrate only on the most difficult pronunciation problems. The less problematic pronunciation sounds will have to be dealt with by the students themselves who could be directed to self-access learning facilities and materials that are available and accessible to students. There are any number of audiotapes, VCD movies and even CD-ROMs on learning English pronunciation in the market nowadays, but it is the teacher's responsibility to recommend the most suitable titles to meet the needs of the students. In addition, it is also feasible to use children's poems, nursery rhymes and tongue-twisters with adult learners. This will relieve the tedium of using pronunciation drills from textbooks.

With the pre-matriculation students from China it is possible to see some improvement in their pronunciation after 6 months of intensive English learning. During this time the most important teaching strategy is to make the learners become aware of their problems, identify the mistakes and be able to correct their errors themselves. This exercise need not be monitored by the teacher: instead, the students should be assigned to do this outside class with a partner and a test can be then conducted by the teacher as a follow-up activity. The ability to listen and identify errors is crucial in any pronunciation learning and if students can succeed in doing this, any follow-up teaching will be easier. Unfortunately, training students to listen for their own errors is very time-consuming as it necessitates individual coaching – listening to the student's errors, identifying it, correcting it and training the student to do the same, and with the aid of audio equipment and materials. This exercise is certainly effective for long-term success but it may be too labourintensive and tedious if the class is large. But such a teaching strategy can be used on a less frequent basis with large groups of students.

In classroom teaching it is not necessary to teach pronunciation as a special lesson; rather it can be taught whenever appropriate but it must form a component of the language activity.

Using a language laboratory should facilitate the teaching of pronunciation but the lessons and drills should not be tediously long. Sometimes pronunciation lessons may give rise to boredom to those who are quite good, especially female students, if the teacher concentrates too much on the weaker ones. One way of solving this problem is to teach the weaker ones outside-class hours or alternatively to give self-access learning materials to the students. Generally, with a large class size of 20 for instance, it is difficult trying to achieve good results. It will be more effective teaching few students at a time, which can be done while the rest of the class is involved in other non-oral language activities.

The role of the teacher is basically the initiator and guide, the rest of the work should come from the learners themselves. Thus though we may be able to achieve a reasonable standard of correct pronunciation among the PRC students, good pronunciation is a long-term learning process.

Summary

Although pronunciation problems can vary from individual student to individual student from any region of China, the most acute problems in this study are with /r/, /l/, /n/, the fricative $/\theta/$. either at the beginning or end of words, and /o:/ since there is no such sound in Chinese. More accurate sounds can be produced with diphthongs and vowels. Most Chinese students have few problems with /v/, as in veal, /f/ as in feel, /w/ as in war, /m/ as in mouse. summer, /h/ as in house, /t/ as in chin, coach, and /p/ and /b/, /t/ and /d/, /k/ and /g/ at the beginning of words as in pig-big, ten-den, could-good. While this general observation can be made with the pre-matriculation students who do the Intensive English Course in CELC, there will be other kinds of pronunciation problems with much older Chinese learners such as graduate students from the People's Republic of China and this will need further investigation. Further research is needed to examine the influence of the mother tongue (various Chinese dialects from different provinces of China) on learning English pronunciation, and on problems of pitch, tone, stress and intonation.

It is generally difficult to concentrate on all phonetic sounds to help improve the pronunciation problems of PRC students but

this study has attempted to identify the most difficult ones. There may be exceptions to the observations made in this study but in general, the students who come from the coastal cities such as Shanghai and Guangdong would have better speaking skills and more accurate pronunciation as they may have more exposure to Western media. Similarly, students who have attended English lessons conducted by native English speakers in China have better speaking skills. The challenge then is teaching Chinese students who are older and more mature, and students who live in the more rural areas or who have very strong Chinese dialectical accents. On the whole, the findings of this survey would help teachers of PRC students become more aware of their specific pronunciation weaknesses and to devise various teaching styles and materials best suited to these students.

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Appendix 1

Pronunciation Problems Transcribed from Videotaped Oral Presentations

South China (Guangzhou, Shenzhen):

while - whie /l/ missing class -cass like - lie /k/ missing climbing - clibing /m/ missing relatives -rilatives mountain -mountein holiday - halliday activity - actibity everywhere -everywhere/ev-vhere village- vil-la-ge (3 syllables) dormitories - dormtrories (3 syllables) students - stdents(1 syllable)

North China (Beijing, Shandong)

everyone -evrrone (stress on "rr")
usually - urrually
must-must-te (2 syllables)
think -think-er(2 syllables)
great -gret-te (2 syllables)
subject -subjet-te (3 syllables)
almost -almot-te (3 syllables)
college -col-le-ge (3 syllables)
normally - norm-ly (2 syllables)
satisfied - sat-fied (2 syllables)
share- shell /r/ missing

Central China (Shanghai, Hangzhou)

world - word /l/ missing everything - ev'thing /r/ and /v/ missing experience - experance attitude - alttitude /l/ added career - caleer warmth - warm /th/ missing fireworks - fiworks /r/ missing(2 syllables) lunar -lular snow - slow finish - finsh /i/ missing(1 syllable)

Central China (Hubei, Henan, Sichuan)

technology - tech-lo-lo-gy knowledge - low-led-ge (3 syllables) evening - eve-ling arrangement - a-lange-ment know - low not - lot level - nevel needs - leeds enough - elough natural - latural nowadays - lowadays another - anlather rather - lather grow - glow zero - dero clothes - cloth-es (2 syllables) much - much-er (2 syllables) is - *i*-*iz* (2 syllables) first - first-te (2 syllables) job - job-ber and - and-de eggs - egg-es should - should -de results - resuts /l/ missing introduce - int-duce (2 syllables) everyone - evr'one (2 syllables) usually -ujually knowledge - knowledge-ge (3 syllables) revolution - rev-lution (3 syllables) secondly - secondarly (4 syllables)