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Teachers' cognitions of corrective feedback on pronunciation: Their beliefs, perceptions and practices



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ABSTRACT

There has been research on teachers' cognitions of corrective feedback (CF), their knowledge, beliefs and attitudes and how they are reflected in practice (Borg, 2003; Yoshida, 2010). However, there has been very little attention paid to teachers' cognitions of feedback on pronunciation. The data reported here is based on semi-structured interviews (N = 19) and classroom observations (N = 6) of English as a second language teachers in New Zealand. In an earlier survey, the author had found most pronunciation teaching was ad hoc and in response to errors. Most teachers provided CF, usually through recasts and follow-up listen-and-repeat practice, although other techniques were also reported. The interviews reaffirmed these findings and provided a more in-depth picture, especially with regard to correction techniques, how effective they were believed to be, and the importance of encouraging learner autonomy through peer and self-correction. From classroom observations of six interview participants on two occasions each with follow-up discussions, four key themes emerged: what teachers correct (phonemes and words), how they correct, timing and rationale for CF, and their beliefs regarding sources of errors. They also reveal gaps in teachers' knowledge and training and a need for further research into precisely what makes CF effective.

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1. Introduction

This paper aims to provide insights into teachers' cognitions of corrective feedback (CF) on pronunciation. Teacher cognition refers to teachers' knowledge, beliefs, perceptions and attitudes, and how these are reflected in classroom practice. There has been a significant amount of research into teachers' cognitions of language teaching, focusing mainly on grammar (Borg, 2003) and more recently there has been some focus on pronunciation teaching (Baker, 2014). As Baker (2014) notes, much of this research has relied on surveys, but interviews and classroom observations are needed to more fully understand teachers' cognitions. Further, there has been almost no research into teacher cognition of CF on pronunciation (Baker & Burri, 2016). This is a key aspect of teachers' cognitions of pronunciation teaching generally as it has been found that the majority of attention teachers give to pronunciation is ad hoc and in response to errors (Foote, Trofimovich, Collins, & Soler Urzúa, 2016).

It is important to know about teacher cognition because it can inform researchers, teacher educators, coursebook and curriculum designers, and teachers in their own reflective practice. In the area of pronunciation research in particular, until the mid-nineties there had been no significant empirical classroom-based research into the effect of pronunciation teaching and/or corrective feedback (Murphy & Baker, 2015). Consequently, teachers were left to rely on their own experience and that

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of others. This started to change with the research by [Derwing, Munro, and Wiebe \(1998\)](#) that showed pronunciation teaching could be effective. Further research by them and others has since led to advances in our understanding of what teachers can do to help learners become more easily understood ([Couper, 2011](#); [Derwing & Munro, 2015](#)). There have also been advances in knowledge regarding what teachers should be teaching and correcting as a consensus has been built around the importance of comprehensibility, rather than aspiring to a native speaker accent, and the need to teach both segmentals and suprasegmentals ([Grant, 2014](#)). However, what we do not know is the extent to which these advances have found their way through to teachers and their classroom practice.

2. Literature review

This report is set within the context of a wider study into teacher cognitions of pronunciation teaching. Therefore, the literature review is oriented to teachers' cognitions of CF on pronunciation and framed by what is known about CF on pronunciation and about teachers' cognitions of pronunciation teaching in general. By way of background, it begins with a brief overview of CF in language teaching, followed by consideration of the knowledge base of CF on pronunciation and teachers' cognitions of pronunciation teaching in general and CF in particular.

2.1. Corrective feedback in language teaching

Corrective feedback has been a significant focus of attention in research into language teaching and learning, especially since it became accepted that an explicit focus on form could contribute to learning within a communicative language teaching framework ([Brown, 2016](#)). Prior to this the nativist model of second language acquisition, dominant until the late 1980s ([Macaro, 2003](#)) proposed an autonomous language acquisition device (LAD), meaning there was no interface between what we might learn explicitly and our implicit knowledge of language ([Ellis, 2009](#)). [Krashen's \(1982\)](#) theory of comprehensible input and the idea that instruction and corrective feedback (CF) could not result in acquisition was based on this ([Doughty, 2003](#); [Housen & Pierrard, 2005](#)). A number of theoretical positions now allow a role for CF. These include [Schmidt's \(2001\)](#) noticing hypothesis, [Long's \(1996\)](#) interaction hypothesis, [Swain's \(1995\)](#) output hypothesis, skills-based approaches ([Anderson, 1993](#); [de Keyser, 1998](#)), Socio-Cultural Theory ([Lantolf, 2011](#)) and usage-based approaches such as Cognitive Linguistics ([Mompean, 2014](#)).

Much CF research has drawn on [Hendrickson's \(1978\)](#) questions: Should learners' errors be corrected, if so, then when, which ones, how, and by whom. The "how" has been of particular interest, with [Lyster and Ranta \(1997\)](#) identifying six types of CF: explicit correction, recast, clarification request, metalinguistic feedback, elicitation, repetition. They found that recasts were by far the most common form of CF. This classification has tended to be followed by other researchers in their descriptions of type of feedback ([Brown, 2016](#)). [Lyster, Saito, and Sato \(2013\)](#), in reviewing studies of oral CF further refined [Lyster and Ranta's \(1997\)](#) classifications in the light of modifications from [Lyster and Saito \(2010\)](#) and [Sheen and Ellis \(2011\)](#). They propose a spectrum of how implicit or explicit the CF is and whether it involves reformulations or prompts. Reformulations range from implicit conversational recasts, a reformulation to confirm meaning, to pedagogical recasts to correct both form and meaning, and more explicit correction in which the teacher says an utterance is incorrect, corrects it and may go on to provide an explanation. Prompts also range from asking for clarification of meaning, to eliciting the correct form by more explicitly signaling there is a problem, and most explicitly, using direct questions or metalinguistic cues to elicit the correction.

[Brown's \(2016\)](#) meta-analysis found that most CF focused on grammar (43%), followed by lexis (28%) and pronunciation (22%). However, many investigations have not distinguished between CF on grammar, lexis and pronunciation, making it difficult to know the extent to which findings also apply to pronunciation CF. Examples include [Yoshida \(2010\)](#) who found recasts often go unnoticed by learners and [Loewen and Philp \(2006\)](#) who reported that recasts can be more effective when made more explicit through accompanying systematic cues. Further, perhaps somewhat counter-intuitively, [Lee \(2016\)](#) found that corrective feedback helped to reduce learners' anxiety.

2.2. Corrective feedback on pronunciation

Although there has been little research into the effect of different methods of CF ([Dlaska & Krekeler, 2013](#)), recasts to correct pronunciation have been found more effective when the item being corrected has been previously taught ([Saito & Lyster, 2012](#)). It has also been found that prompts are more effective than recasts ([Gooch, Saito, & Lyster, 2016](#)). While these studies focused on segmentals, [Saito and Saito \(2017\)](#) and [Dlaska and Krekeler \(2013\)](#) included CF on suprasegmentals and found a positive relationship with increasing comprehensibility. Explicit CF has also been found to raise awareness, which can improve both production and perception ([Kennedy, Blanchet, & Trofimovich, 2014](#)).

The role of speech perception in pronunciation learning has long been understood in the area of L2 speech research ([Flege, 1995](#)) and there have been many laboratory studies with a CF component that have shown new categories can be learned ([Strange, 1995](#)). The need to understand how to categorise L2 sounds in learning L2 speech is becoming better understood in pedagogical circles (For example, see [Derwing, Thomson, Foote, & Munro, 2012](#); [Kissling, 2014](#)). It underpins the development of High Variability Phonetic Training (HVPT) ([Pisoni & Lively, 1995](#); [Thomson, 2012](#)), which involves giving learners practice and feedback based on listening to many speakers in different phonetic contexts. It has also been found that improved

perception predicts improved production (Lee & Lyster, 2017; Thomson, 2012). Therefore, learners benefit from CF on both perception and production of pronunciation.

Some researchers have attempted to provide teachers with theoretically and empirically-supported guidance on CF, beginning with the understanding that speech categories are based on language specific phonological concepts (phonemes, syllables, stress etc.) (Fraser, 2010; Mompean, 2014). Couper (2011) and Fraser (2001, 2010) draw on the conceptual nature of pronunciation to explain how teachers can help learners to improve their pronunciation. They argue that firstly learners need to understand there is an error, then know precisely where it is (often requiring visual support), what it is, and then how to produce it accurately. Therefore, teachers need to explain how they hear what the learner is saying and help to compare and contrast the difference between what they said and what they wanted to say, defined by Fraser (2001) as Critical Listening. It also places an emphasis on effective communication by socially constructing mutually understood metalanguage that can be used when providing feedback (Couper, 2011). Darcy (2018) makes a similar suggestion, that CF must direct learners to the form and help them “to notice how their productions are different from what they should produce” (p.29), leading to increased awareness. Derwing and Munro (2015) argue that awareness can be increased and CF made more effective by using diagnostics to analyse learners’ needs and guide them in setting goals. They also suggest teachers should encourage peer correction as another important source of feedback. In conclusion, the actual way in which different types of CF are provided is a key factor in the likelihood of its success.

2.3. Teacher cognition of pronunciation teaching and corrective feedback

As teacher cognition of pronunciation teaching in general is a relatively new area of investigation, this section begins with a brief overview of some of the themes that have been reported on, before considering the few studies that have included some focus on CF. As with the teachers in the study reported on here, most of the teachers in the following studies were teaching adults. However, in Henderson et al. (2012) and Couper (2016b) the participants were teaching across a range of ages and in Foote et al. (2016) the participants were teaching 11-12-year-olds.

A number of themes in relation to teacher cognition of pronunciation teaching have emerged consistently from a growing number of studies (Couper, 2016a, 2016b, 2017; Baker, 2011, 2014; Burri, 2016; Buss, 2013; Foote et al., 2016; Henderson et al., 2012). These are the need for better training and professional development and that teachers sometimes neglect pronunciation for various reasons even though they feel it is important and needs to be taught. These reasons include lack of confidence that they have either sufficient content knowledge or content pedagogical knowledge (Shulman, 1987). Another key theme is the question of which aspects of pronunciation they should teach. Foote et al. (2016) found that teachers tend to teach segmentals more than suprasegmentals while Buss (2013) and Couper (2016a) suggest teachers focus on words and segments more than prosody.

A theme closer to CF is that many teachers tend to rely solely on listen-and-repeat practice, which is typically used on an ad hoc basis in response to errors and as a follow-up to recasts (Buss, 2013; Couper, 2016a, 2016b; Foote et al., 2016). Foote et al. (2016) conclude that teachers are not planning in sufficient pronunciation activities that can be referred back to when providing feedback, and that it is important to do this to make CF effective. A related consideration is the timing of CF, with some teachers choosing to give delayed feedback, possibly taking notes and using the board to correct later in the lesson (Couper, 2016b). In addition to the question of timing, there is also the issue of who should correct and how to take affective factors into account. This leads to some teachers preferring to use peer and self-correction as this is seen as less threatening, or perhaps not attending to errors at all (Couper, 2016b; Roothoof, 2014). Some teachers are aware that CF can work if it is done in the right way, but others simply believe that it is not effective (Buss, 2013; Couper, 2016b; Junqueira & Kim, 2013).

The only published research I am aware of that reports specifically on teachers’ cognitions of feedback on pronunciation comes from Baker and Burri (2016). They reported on the cognitions of experienced English for Academic Purposes (EAP) teachers. The participants believed that feedback was essential to achieving comprehensibility and all used similar approaches: peer feedback, whole-class feedback, recasting, and oral or written feedback on voice recordings. They focussed on features that were central to the teaching they were working on, that is, they had already provided explicit instruction. However, they did have concerns about the amount of class time it takes and its effectiveness.

Finally, a survey of New Zealand teachers’ cognition of pronunciation teaching (Couper, 2016a) reported a majority (61%) of respondents said they often or almost always corrected errors, and the timing depended on the type of activity, the stage or focus of the lesson, and whether or not communication was affected. Participants mainly used recasts (65%), and elicited repetition (51%). 24% also provided explanations. An open question suggested a range of explicit CF methods were used, including explanations of physical production and in two cases perception. Some described the use of prompts and reformulations or using prompts to encourage self-correction and peer correction. This survey provided a backdrop to the interviews and classroom observations reported here.

2.4. Background and aims of the study

The data for this article is drawn from a larger study that revealed a number of themes: training, knowledge and confidence, pronunciation goals, teaching focus and identity, and the difficulties of teaching mixed L1 classes (reported in Couper, 2017), corrective feedback on pronunciation teaching (reported here), and pronunciation teaching techniques (in preparation). The study aims to inform teacher educators, researchers, and teachers and encourage reflective practice.

The aim is not to analyse how effective CF was, but rather to portray something of the complex systems that interact in the teacher's emergent cognitions as they engage in and reflect on their classroom practice (Burns, Freeman, & Edwards, 2015). That is, we want to view how teacher's knowledge and beliefs are expressed in context as we understand the dynamic embodiment of their inner worlds in the ecologies of the broader sociocultural context of places of learning and educational systems through to national language policies and global issues (Kubanyiova & Feryok, 2015). In the nature of an emergent design, the research question is left deliberately open: *What are teachers' beliefs and practices regarding CF?*

3. Methods

3.1. Participants

It is perhaps important to include myself here as co-participant and researcher. As an experienced teacher, I have been investigating the effectiveness of my pronunciation teaching. However, before I can help other teachers to develop their pronunciation teaching skills, I need to understand what they are doing and why. During the semi-structured interviews and discussions following lesson observations, my position as both practitioner and researcher fostered an exchange of views involving “a co-constructed reflective process that in turn created teacher-researcher dialogue” (Burns et al., 2015, p. 593).

3.1.1. Interview

There were 19 participants recruited from five different institutes through direct approaches to the person in authority asking them to forward information about the project to their teachers. The institutes represented a range of education providers in the Auckland region, with three catering to international students and two focusing on domestic students. The participants represented a range of experience (from less than one to more than 25 years) and qualifications (from a BA with an introductory language teaching to certificate to Masters in TESOL). All participants had adult students at the time of the interviews and they represented a range of linguistic and cultural backgrounds. None of them were teaching classes that focused solely on pronunciation and students' needs included academic English and everyday English and culture.

3.1.2. Observation

The participants were recruited from those who had participated in the earlier interviews. At the end of the interview, they were invited to participate in the classroom observations. As it eventuated, those who accepted were all well qualified and experienced teachers with ten years' or more experience. A more representative sample would have had its advantages, but perhaps not surprisingly, those with less experience were more tentative about being observed. Their classes were not specifically pronunciation classes, but rather they were general English language classes. Jim, Carol, Ben and Nick were teaching international students in a private language school while Kate and Linda were teaching new migrants and refugees in public tertiary institutes. A general description of the class they were observed teaching is provided in Table 1.

3.2. Data collection and analysis

3.2.1. Interview

Data was collected through semi-structured interviews held as an informal and equal exchange of views allowing for themes to emerge relevant to the participant's cognitions of their practice. Participants were given a list of guiding questions to be used as prompts (See Couper, 2017). These questions covered a range of areas in relation to pronunciation teaching but the data for this report is found in relation to question four: *Do you correct pronunciation? When and how often? Do you think it works? What works best?* It should be stressed that these questions were not followed religiously but were a guide to help the participants. The interviews were allowed to develop naturally rather than following a particular order. They were audio-recorded and transcribed, and were 30–40 min long.

Table 1

Overview of classes observed.

Teacher	Class Level	Students	Country of origin
Jim	Pre-Int.	12 Int ^a Age: 18-25	Middle East, China, Korea
Carol	Mid-Int.	12 Int ^a Age: 18-25	Middle East, China, Japan, Europe
Ben	Higher Int.	12 Int ^a Age: 18-25	China, Japan, Middle East, Thailand
Nick	Upper Int.	10 Int ^a Age: 18-25	Japan, China, Korea, Thailand, Middle East
Kate	Elementary	15 res ^b Age: 18-45	Asia, Middle East, Africa
Linda	Low Int.	20 res ^b Age: 18-60+	Asia, Middle East

^a International students, many of whom plan to study at university in New Zealand.

^b Residents: New migrants and refugees.

Initially, the interviews were analysed for themes that emerged in relation to teacher cognition, using an inductive analysis through multiple readings and noting emerging themes (see Couper, 2017). For this report, data related to the theme of CF were reanalysed through a similar process of reading and rereading, noting examples that were representative of emerging themes. Themes centred around the ad hoc nature of most pronunciation teaching in response to errors and the range of different techniques used in error correction. Perceptions of the effectiveness of error correction and the role of peer and self-correction in encouraging learner autonomy were also themes that emerged.

3.2.2. Observation and post-observation discussions

Data in relation to actual teaching practice were collected through two observations of each of the six participants and related follow-up discussions. Field notes were taken during the observations, noting examples of anything related to pronunciation. I also audio-recorded the lesson to enable a more detailed analysis later. In hindsight, a video recording would have been more useful, especially when getting a second opinion on my own analysis. However, I had decided not to introduce a video recorder as I thought this would be too intrusive. The main focus was on the teacher and the teacher's actions. It would have provided an additional perspective if data on the learners' perceptions had also been included in the design of the study, however, for practical reasons this was not the case. In the post-lesson discussions, which were also audio-recorded, I asked participants for their reflections on the class and asked questions based on what I observed. This generally led to stimulating and wide ranging discussions and reflections relating to pronunciation teaching. Both the audio-recordings of lessons and discussions were transcribed.

I began analysing the data by summarising my field notes then made notes from the post-teaching discussions. I read and re-read the discussions for themes that emerged in relation to error correction. Then I went to the transcriptions and looked specifically for examples of feedback provided on errors. This led to a description of each participant's lessons and follow-up discussions in relation to corrective feedback. Themes and comments for the previously analysed semi-structured interviews were also reread in comparison with this description. A colleague listened to the audio of the classes and discussions, with support from the transcriptions. She noted themes that emerged as well as examples of corrective feedback and methods used. Her notes were then used to corroborate, and in some cases add to, my own observations. The same colleague had also corroborated the findings from the earlier interviews (see Couper, 2017). The result of this process was rather long descriptions of discussions and observations for the six participants. In order to make this report more concise and readable, further analysis of these descriptions, looking for key organising principles across them all enabled the results to be distilled down further into four key topic areas: 1) What teachers tend to correct, 2) How teachers tend to correct it, 3) Timing of corrections and reasons for attending or not attending to errors, 4) Teachers' beliefs about errors and reflections on their teaching.

4. Results

4.1. What teachers tend to correct

During the interviews there was limited direct discussion of what participants corrected. This was also often the case during discussions of classroom observations, although Jim said he corrected a lot, while Nick said he did not correct very often and Ben implied this when discussing his learners' difficulties, which he was very aware of. Carol said that she tends to just correct individual sounds and that she doesn't correct dropped syllables or sentence stress. She does not worry about aspects of pronunciation that she deems not to be important such as secondary stress and intonation. Kate talked about correction of individual phonemes. She also said she focuses on intonation, especially when a student does it really well, she will echo it back to the class.

During classroom observations they all corrected phoneme level errors at least some of the time with Ben and Nick appearing to correct a little less often than the others. All participants gave feedback at the word level. There was often a focus on word stress, syllables and the length of the stressed vowel. Jim, Kate, and Linda often corrected students who added sounds (epenthesis) or omitted them. Jim and Linda also encouraged students to use contractions, noting that the failure to use them could interfere with the rhythm. The collaborator made similar observations. Some specific examples of what was corrected are presented in the next section.

4.2. How teachers tend to correct

During the interviews (N = 19), the participants all discussed approaches to pronunciation teaching in relation to errors with seven of them explicitly stating their teaching tended to be ad hoc and in response to learners' difficulties. The various approaches to correction that emerged during the semi-structured interviews are summarised in Table 2.

Correction techniques ranged from implicit recasts with no expectation of learner repair (6) through to more explicit cues involving modelling and an opportunity for students to repeat (15) and prompts (such as repeating the incorrectly said word with a questioning tone, repeating it exactly as the learner said, or saying things like "that doesn't sound right") to self- or peer correction (9). Other explicit approaches involved explanation such as comparing the problem word with another, more common word to demonstrate the sound being targeted. Four of the participants talked about how they "break it down" into individual words and syllables to try and help learners to hear what was wrong. Two used physical descriptions while five

Table 2

Error correction techniques (Shaded rows are classroom observation participants).

Name	Re-cast	Listen	Repeat	Prompt self correction	Prompt peer correction	Compare words	Break it down	Physical explanation	Percep-tion	1-1 focus
Amy		X	X		X					
Ben		X							X	
Carol	X	X	X							X
Dan		X	X					X		X
Donna		X	X					X	X	X
Helen				X			X			X
Jim		X	X						X	
Joe		X	X							
Julie		X	X				X			
Karen		X	X	X	X					X
Kate	X	X	X			X				X
Linda	X	X	X	X	X				X	
Lisa				X	X					
Nick		X	X	X	X				X	
Nicola	X	X	X	X						
Sandra				X		X				
Sharon	X	X	X				X			X
Susan	X	X	X							
Tracey		X	X	X			X			

provided corrective feedback in terms of how they perceived what the learner had said, comparing and discussing the differences.

During discussions related to classroom observations, all six participants said they got students to listen to them modelling the pronunciation with all but Ben saying they got their students to repeat after them. Carol said she often turns this into an extended drilling session. Carol, Kate and Linda said they used recasts. Kate discussed how she corrected students by getting them to compare sounds in problem words with sounds in words they already knew. Jim, Carol and Nick explicitly discussed the importance of raising awareness. Jim, Ben, Nick and Linda said they tried to be explicit about how they perceived their students' pronunciation by writing their perceptions on the board and explaining this was how they heard it. Carol also provides descriptions of articulation and believes that are useful.

In classroom observations, Ben is the only participant who did not appear to make use of recasts, but he did sometimes model target words. The others, especially Jim, Kate and Linda, all used recasts, and listen-and-repeat practice. Linda, Carol and Jim also followed up with choral repetition.

Listen-and-repeat is both a reformulation and a prompt as students are given a model and prompted to imitate it. Other prompts observed included clarification requests, such as "Sorry?" (Nick), and various paralinguistic and linguistic signals to elicit the correct form. These included Jim exaggerating the length of the vowel during a recast and demonstrating the stressed syllable by opening hands wide, and eliciting "where's the stress?". Carol, Kate and Linda elicited the number of syllables in words when mispronounced, and followed up by eliciting where the stress was or, on two occasions, the pronunciation of contracted speech. Other examples of elicitation included Nick asking "What is the last sound?" and Linda saying "I want to hear the end". Less successful attempts were made at eliciting an explanation of stress (Ben) and what the difficulty was that her students had with the pronunciation of "vocabulary" (Kate). Elicitation often led to further explanation, which could be quite brief, such as "The stress is on the first syllable" (Nick).

Linda used the board in her explanation of the difference between "there is" and "there's". In this case, the student read out the sentence "There is a bum in the restroom". Linda wrote "there's" and "there is" on the board and used this to make it clear to the students what she was talking about. Teaching excerpt 1:

Linda: How do we say that? [pointing at "there's"]

Students [in chorus]: There's

Linda: Is it said the same as this? [pointing at "there is"]

Students [in chorus]: There is.

Linda: There is. And that one? [pointing at there's]

Students [in chorus]: There's There is [different students say it differently]

Linda: Those two words, There is, two syllables. How many syllables in that one?

Students [in chorus]: One.

Linda: One, OK. Say it again. This one.

Students [in chorus]: There is

Linda: This one.

Students [in chorus]: There's/There is [different students saying it differently]

Linda: Good. This one? [Repeats two more times, students more accurate]

Linda: Good, so one syllable, good. Because they are put together to make them shorter so the sound is shorter.

Another example is Jim's attempt to explain the problem of epenthesis to a student. In this segment of the lesson, students were reading aloud to the teacher and the whole class. Teaching excerpt 2:

Jim: Okay so please choose one sentence from your list, one question.

Student: Have you ever spoken in the front of a lot of people?

Jim: Good, but you're putting in another word, in the front.

Student: In the front. In the front.

Jim: You don't need to put in the extra, the pronunciation is okay.

Student: In the front

Jim: In the front, no. In front.

Student: In a front.

Jim: In front

Student: In a front

Jim: In a front or in front?

Student: In a front, in a front.

Jim: Slowly. In front [clear space between]

Student: In front. [clear space between]

Jim: Okay, fast.

Student: In a front, In a front [laughter]

Jim: Can you hear? So what you're saying to me is slowly in front.

Student: In front.

Jim: And then when you put the words together you are giving me an extra word, you are giving me one more word, in a front.

Student: In a front

Jim: Good

Student: In a front.

Jim: Good, Okay.

Jim, Carol and Nick all provided explanations in relation to articulation and Kate focussed on the portrayal of phonetics and stress in the dictionary as a way to build a framework for independent learning.

Jim and Kate broke utterances into words and words into syllables. Although the idea makes sense as a way to help students understand each part of the word, it can be difficult to accurately model each syllable, leading to a loss of reduced vowel forms and somewhat unintended pronunciations. In the following example, Kate was encouraging students to work out how to pronounce "vocabulary" for themselves. She began by breaking it down into individual syllables and eliciting how many syllables there were in the word. She received answers ranging from three to five. Then Kate asked them to say each syllable individually and they said "vo cab u lary, four". Her response to this was that she thought it was five. The discussion continued for some time before Kate elicited how to establish the syllables, or the number of beats. Finally, a student said "I know, the vowel". Kate then explained this and the term syllable before attempting yet again to elicit the number of syllables. She then asked them to check it in their dictionaries (online). The discussion continued with students still confused and Kate finally telling them, saying each syllable, which tended to distort the pronunciation such that all syllables were stressed. She tried to show the stress and number of beats "dah, **dah**, dah, dah, dah" before eliciting the stress, without much success so she told them to look it up in the dictionary. This led to a discussion of differences between British, American and New Zealand English, but not much certainty as to where they should stress the word.

Another key technique that teachers discussed during the interviews was peer and self-correction, sometimes with the aim of encouraging learner autonomy. Sandra gets students to record themselves and does not give them feedback but just plays it "and I let them listen to themselves. And often they can pick up a lot of things ... and we do a kind of feedback together". Karen strongly believes learners can recognise and correct their own errors and should be encouraged to do so,

you correct it, they repeat it well enough and two minutes later they make the same mistake, and I don't feel like there's enough cognitive processing there for them to really stick it in their brain. I will give a model if it's necessary but if it's something I know they know how to do, they just need a second to check in on themselves.

When students do not understand what a classmate says during pair or group work Sharon says, "ask the question, what word is difficult for you to hear or what word is difficult for you to produce and have them kind of self-correcting somebody". Amy gets the class to correct and tries to put the onus on the student to be clear "I get them to think about why it is that other people don't understand them". At the beginning of the course she tries to encourage students to take responsibility for their own learning and determine how they want to be corrected "I want them to take it on board for themselves because it is their problem so they need to want to fix it".

Those who were observed teaching, all encouraged peer correction during pair and group work. Jim talked about how he often gets students to work in groups to work out different problems they have with particular sounds. This was also seen as an opportunity for the teacher to provide more individualised feedback, which leads us onto the question of timing in the next section.

4.3. *Timing of corrections and reasons for attending or not attending to errors*

During the interviews, seven participants described how they would often look for a quiet moment to provide individual feedback when the rest of the class was working on something else. However, it was seen during the observations that all the participants provide immediate correction at least some of the time. Nevertheless, there was also a strong sense of the need to be careful about how this was done, and when possible to be discrete. Linda talked about the importance of rapport when correcting, and also when allowing for peer correction. Carol prefers to discretely make learners aware of their pronunciation difficulties and give them feedback when working in groups. Ben also prefers to provide individualized feedback as he is concerned about damaging students' confidence. He also thinks that "sometimes you just have to let the students sort it out, and negotiate meaning rather than the teacher jumping in". Participants often chose not to provide feedback if it was going to interfere with the flow of a class discussion. For example,

Carol comments: "I don't want to interrupt everyone to focus on things" and Nick is also concerned about "interfering with general meaning" although not if he is specifically focusing on pronunciation. In talking about a teaching excerpt, he says "I didn't think it was appropriate to stop them at that stage". He describes how he gives feedback on students' practice oral presentations, "I usually jot down four or five key points while they are speaking and then give them immediate feedback and they seem to be quite happy with that". Linda made a similar comment and also explained how she sets aside time once a week to provide feedback on pronunciation. Finally, Jim says he focuses on "consistent errors" and describes his decision-making process when attending to the epenthesis error presented earlier,

Again in my head I was thinking, do I pick him up, yeah OK we'll have a stop here, but I was thinking if I have to do that for everyone, that's going to eat time. That's always a juggle you know.

As well as concerns about learners' confidence, interrupting the flow of the class and the time it takes, the participants indicated other reasons for attending or not attending to errors. These involved their own knowledge, confidence and beliefs. As with the interviews, the participants generally felt less confident about teaching stress and intonation.

Jim says he's terrible at knowing where the stress is himself which tends to discourage him from putting too much focus on it. Carol doesn't think it is worth teaching intonation so will sometimes choose not to give feedback on it. Ben sometimes doesn't deal with problems that are entrenched because he doesn't know where to start. He describes one student's difficulties with rhythm and stress as having "a lack of light and shade". "I would like to look at that [the student's pronunciation] but I need to kind of analyse it a bit more and get it clear in my mind what it is that she is doing". He discusses how it would be important to use diagnostic tests to help students develop a plan for their learning but is a little unsure about how to do this. Ben describes himself as having a "very forgiving ear" and often doesn't even notice pronunciation errors. In my discussion with Kate we talked about how the vowel sounds change in their reduced form, but Kate is not really very confident about dealing with this: "No, I mean it just sort of makes me think how complicated everything is. There is so much going on in the classroom. There is just so much going on."

4.4. *Teachers' beliefs about errors and reflections on their teaching*

One theme that arose was teachers' doubts as to whether or not CF worked. For example, Karen says recasts do not work,

I think that's the easy way out as a teacher probably ... you hear a mistake, you correct it, you move on, but so do the students the aware students probably hear you and notice it but so many students I think hardly listen to what the teacher says anyway.

Joe observes "It works for the moment but probably the next day they're going to come and make the same mistake again". Tracey says she is not sure as does Susan,

I don't know if it works. Some students I've noticed that it works, other students I seem to correct the same mistake over and over again and they don't seem to remember or they never heard the difference so they're just kind of parroting me.

On the other hand, Sharon and Carol believe that correction works.

While Jim does not really think it works, he feels the investment in the interaction is valid "They feel it is a necessary part of the learning process you know, they really do." Therefore, he hopes that it may help to address his students' lack of awareness of their pronunciation. In discussing whether or not he thought the student with epenthesis problems, presented in the earlier example, had learnt from the correction, he said "No, and I wonder how, because I don't think he was aware of it at all." This led on to the discussion of possible sources of error. Here Jim introduced the interesting concept of a slip of thought, "I was wondering about the pressure of the situation and not reading it properly, [was he] thinking there is a plural form or whether it [the error] was a slip of thought." Carol also perceives differences in causes of errors "normally they are just saying

it wrong because they didn't remember to say it right or they didn't know that's how you say it". Ben seems to make a similar distinction, in describing many learners' errors as "an individual and particular error, it's not a general error". That is, many errors of stress and syllables relate to knowledge of how to pronounce a particular word rather than understanding the more general concept of the syllable or word stress. Later on he says, "Sometimes I think they are just habits that have been built up without somebody pointing [them] out and [if they are not pointed] out then they will continue to make those errors". Linda reflects on the aims of choral repetition "What I am trying to do is give them the opportunity of practicing and practicing in a group [not ensuring individual accuracy]" She then explains that she is aware of who is having difficulties and that in group work "when they are reading those words it's an opportunity to model again or correct".

5. Discussion

For most participants, the choice of which errors to correct was determined largely by the extent to which communication was impeded or how frequent and widespread a particular error was. In practice, these errors tended to be at phoneme or word level, such as syllables and word stress. Although other studies have not directly reported on which pronunciation features teachers focus on when providing feedback, Buss (2013) and Couper (2016a) reported the same word-level focus in instruction and others have reported a tendency to focus more on segmentals than suprasegmentals (Foote et al., 2016). Given that explicit CF on prosody helps improve comprehensibility (Dlaska & Krekeler, 2013; Saito & Saito, 2017), teachers should be encouraged to develop the skills and confidence to provide such CF.

The choice of type of feedback ranged from simple recasts and prompts to rather long sequences involving reformulations, prompts and metalinguistic explanations. Recasts were the most common form of feedback, as found in a number of other studies (Lyster et al., 2013), and were often followed up with a number of related instructional events. It was observed that recasts often did not lead to any evidence of uptake, also reported by Yoshida (2010) although others have found that recasts can be effective when they relate to previous explicit instruction (Saito & Lyster, 2012). From a theoretical perspective, the success of recasts, and all CF, depends on noticing, and understanding the phonological concept (Fraser, 2010). Prompts were also commonly used by the participants in this study, a finding in line with that of Gooch et al. (2016). These sometimes involved some gesture or oral focus on the point of difficulty although the written form was not often provided. If teachers use such cues to make the feedback more explicit, they should be systematic to increase the chance of learners noticing and learning from them (Loewen & Philp, 2006). Baker and Burri (2016) reported that teachers generally used prompts in this way. It needs to be recognised that the nature of CF is complex and dynamic, varying according to teacher and context, and that typologies of CF may well miss the nuances of CF methods in practice.

This study looked in detail at some typical classroom scenarios where feedback was being provided. Linda demonstrated the importance of using the board to bring learners' focus to the salient point; she combined listen-and-repeat with explanation. Although many of the students appeared to understand it at that point in time, we do not know the degree to which they internalised it. It was seen that they did not all repeat the target accurately, but they did appear to become more accurate following demonstration on the board, explanation and with practice. Although there was little learner-centred dialogue, they were given the opportunity to compare and contrast, which we know is an important feature of pronunciation learning (Fraser, 2001, 2010). Jim made extensive use of listen-and-repeat and explanation to try and get the student to understand epenthesis. This was far from successful because the student had not really been able to hear the difference. Here, critical listening to support the explanation the teacher was trying to provide and meaningful dialogue regarding perceptions of syllable codas would help (Couper, 2011). A third example was provided by Kate who spent a lot of time breaking words down into syllables, but this did not really translate into an improvement in the learners' production because they had not understood the concepts of the syllable and stress in English (See Couper, 2011, 2015; Fraser, 2001, 2010). A planned lesson including these concepts would increase the efficiency and effectiveness of such CF (Saito & Lyster, 2012). The amount of time spent in class on this sort of CF might be why some teachers feel that it takes too much time for too little reward.

Some participants believed that learners could and should correct themselves and each other and that this was a way of encouraging learner autonomy. They sometimes attempted to elicit from students how they perceived the sounds and often drew on peer feedback to assist. On other occasions though, they said they lack the confidence or pedagogical content knowledge (Shulman, 1987) to provide adequate explanations and sometimes it seemed that peer feedback was called upon so that the teacher was not required to provide an explanation. As Derwing and Munro (2015) note, peer-correction is an important source of feedback but that does not mean teachers should never intervene. This is especially so where learners simply cannot hear the difference between what they are saying and what they want to say because they have not formed the concept in the target language (Fraser, 2001, 2010). The solution is planned instruction on the particular aspect of pronunciation. Autonomy can also be promoted through the use of diagnostic tests to help learners set their own goals (Derwing & Munro, 2015). However, the participants did not make use of them as they were often unsure how to carry out diagnostics or simply didn't have time to fit them into their programme.

Teachers often did not go beyond recast, and listen-and-repeat. They argued that this is because of time considerations, not wanting to hold up the whole class for the sake of one or two learners and also not increasing learner anxiety by putting them on the spot (Roothoof, 2014). This issue has also been raised in other research (Baker & Burri, 2016; Couper, 2016b). They mentioned a number of ways that they revisited errors at a later stage for both affective reasons and to provide more individualised feedback, which they could use to raise awareness, as did those in Couper (2016b). The value of raising awareness is well accepted (Kennedy et al., 2014). Decisions about whether or not to correct were also determined by the

teachers' knowledge, confidence and beliefs. As reported in Couper (2017), the participants often lacked knowledge and confidence especially when teaching suprasegmentals, and this was apparent here too when providing CF.

These beliefs also revolved around the question of how effective CF is. Some of the participants were aware of the need to help learners work on perception and noted that difficulty in accurately perceiving sounds was a key reason why CF didn't always work. This is in line with calls for teachers to focus on concept formation (Couper, 2011, 2015; Fraser, 2001) and recent research focusing on giving CF on perception (Lee & Lyster, 2017; Thomson, 2012). Recasts in particular, were often seen as being ineffective because students may not notice or attend to them. They also noticed that even if there is an immediate effect, this learning often does not seem to be retained. Even though it may not always be effective, it is well established that CF is a necessary element of language development (Baker & Burri, 2016; Lyster et al., 2013). Recent books by Grant (2014) and Derwing and Munro (2015) provide useful research-based guidance in how pronunciation teaching, and subsequent CF, can be meaningfully integrated into lessons.

Some participants implied a hierarchy of sources of error ranging from knowing how to pronounce a word but suffering a "slip of thought" while focusing on other features, or not knowing how to pronounce a particular word, a difficulty that can be faced by all speakers, through to more systemic difficulties such as understanding English phonological concepts of syllables, consonant clusters, and stress. This hierarchy has not been widely reported on by researchers. However, they are indirectly recognised in work by Fraser (2010) and Couper (2015) that focuses on tackling the more systemic problems arising from incomplete or inaccurate phonological concepts of the L2 pronunciation.

6. Conclusion

In this study we have seen that teachers provide CF but there are a number of ways in which it could be more efficient and effective. Teachers need to provide CF feedback on prosodic elements and many pre- and in-service teachers would benefit from support in how to do this. Teachers also need help in setting up diagnostics and using them to guide learners when providing CF. Diagnostics are important in goal setting and awareness raising and need to focus on both perception and production. They take time, but this can pay off with more efficient and effective feedback. Within their general language classes teachers need to systematically teach key aspects of pronunciation. This forms the basis for efficient and effective CF. Teachers need to focus on perception too when providing CF. It is a useful place to start when helping learners to form L2 phonological concepts. This also includes awareness raising and involvement of both peer and self-correction in developing autonomy.

Researchers also need to provide more evidence to demonstrate what makes CF effective. It has been established that CF can be effective, but more theory development and research is needed to explain why CF is sometimes effective and sometimes not. For example, work based on L2 speech research by Thomson (2012) has indicated how speech perception can be improved. Research by Fraser (2001, 2010) and Couper (2011, 2015) has focussed on both speech perception and production in explaining how teachers can assist learners to form L2 phonological concepts. However, there is still a need for more research to support these findings.

Finally, this qualitative study has attempted to provide insights into the participants' emergent cognitions as they engage in and reflect on classroom practice. The self-selecting nature of the study limits its representativeness to those who are already interested in pronunciation teaching, in the New Zealand context, and for the observations, to those who were well-qualified and experienced teachers. Clearly, the results cannot be generalised. However, they add to the slowly emerging broader pool of knowledge regarding teachers' cognitions of pronunciation teaching.

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