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#### **EDITORIAL**

The articles selected for publication reflect the aims and scope of the TESOLANZ Journal, that is, to consider research, policy and practice directly relevant to the context of the teaching of English as an additional language in Aotearoa/New Zealand. This year's articles draw on a range of learning and teaching contexts providing insights into learner agency as well as teaching guidelines and resources to inform practice.

In the first article, Geraldine Anne McCarthy examines refugee-migrant background (RMB) students' perceptions of the way friendships assist their second language learning progress. Focusing on Bhutanese students in a New Zealand secondary school, her findings suggest that once RMB students speak some English, they make conscious choices about the nature and extent of their school friendships: first, to prioritise protection of their first language and culture, and then to help second language learning.

Despite an increasing amount of research to guide teachers in pronunciation teaching, it is not clear whether or not this is reflected in teacher education programmes and in the classroom. Drawing on survey data hosted on the TESOLANZ website, Graeme Couper investigates teachers' beliefs, attitudes, and practices with respect to teaching pronunciation. He found that, amongst other things, while teachers strongly believe that pronunciation is important, even the experienced teachers, who were the main respondents to the survey, did not feel as confident in their ability to teach it, and neither did their teacher education prepare them to teach it.

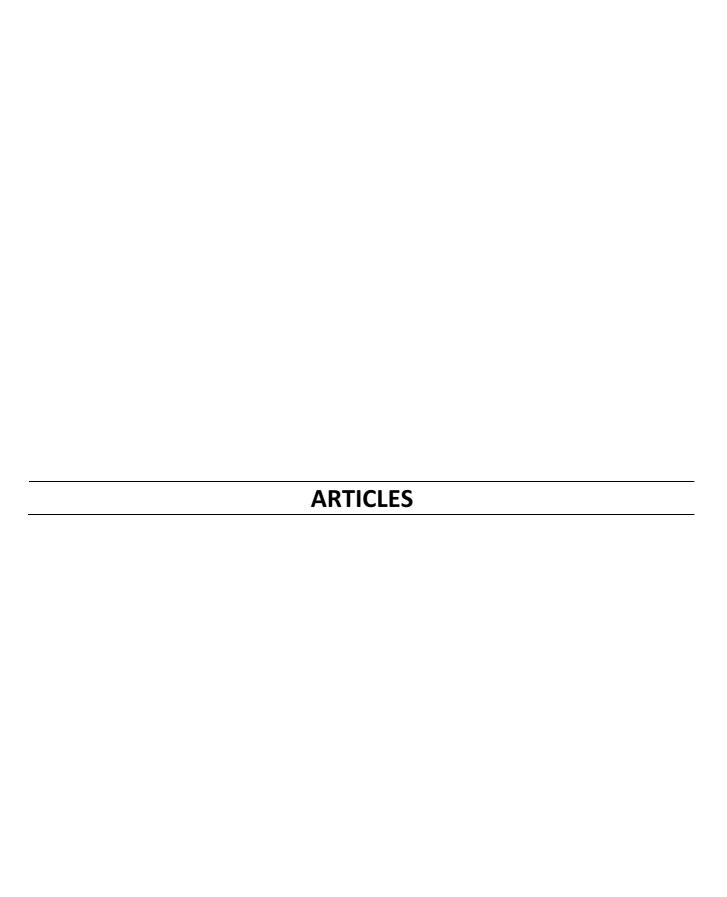
In the third article, Averil Coxhead, Murielle Demecheleer and Emma McLaughlin report on one aspect of a larger project on the Language of the Trades (LATTE) undertaken at a polytechnic in Aotearoa/New Zealand. Focusing specifically on Carpentry, they discuss the lexical learning challenges for trainees and describe the development of a pedagogical word list for Carpentry.

Following on from his studies (with Zina Romova) of the embedded literacies of writing portfolios and the identities they can foster, Martin Andrew considers the learning and assessment value of listening portfolios. Addressing the challenge of curriculum renewal for adult tertiary learners needing listening strategies beyond the classroom rather than mere strategies for comprehension and testing, he investigates the links between students' development of listening portfolios over an eight-week curriculum and their reflections on their metacognitive learning. By thematically analyzing ten students' reflective portfolios and re-presenting their trajectories within narratives, he unfurls their increasing senses of themselves as agential communicators. The portfolios chart the journeys of learners monitoring their application of strategies and evaluating their effectiveness in a range of authentic one-way and two-way contexts.

The book reviews that follow have been selected to cover a range of areas relevant to language teaching and research and to highlight current issues being explored in the literature.

In conclusion, it is important to thank all the contributors who submitted manuscripts for consideration in this year's volume of the journal. Part of the process involved in preparing a manuscript for publication involves responding to questions and guidance from experienced peers. In this respect, we are indebted to members of the Editorial Board for their insight and generosity of spirit that characterize the reviews.

We encourage the many readers of the TESOLANZ Journal who have not yet contributed to the publication to consider doing so in the following year – either individually, or, collaboratively. You will find Notes for Contributors at the end of the journal, but always feel free to contact the Corresponding Editor by email (angela.joe@vuw.ac.nz) if you require any additional information. The closing date for receiving manuscripts will be Monday, 21 August 2017.



### NEGOTIATING FRIENDSHIP PATHWAYS TO ASSIST SECOND LANGUAGE LEARNING AT SCHOOL: ADOLESCENT REFUGEE MIGRANT EXPERIENCES IN NEW ZEALAND

Geraldine Anne McCarthy Massey University, Palmerston North

#### **Abstract**

This article discusses refugee-migrant-background (RMB) students' perceptions of their use of friendship pathways to assist second language (SL) learning in their New Zealand locale. It explores data collected from student, parent and teacher interviews. Situated in Bonny Norton's identity investment model, the study found that, once RMB students could speak some English, they made conscious choices about the nature and extent of their school friendships, to prioritise protection of their first language and culture, and then to help SL learning. Within this framework, first culture gender mores were manifested with in-school friendships and after-school choices, with involvement in dance, sport and hobby groups. The article suggests that by delineating their school relationships, RMB learners stabilised the border-crossings between first and second cultures. By doing so, they improved the chances of avoiding potential cultural conflicts and the dangers of assimilation, so that cultural plurality could be maintained. The outcome was that though RMB students perceived that friendships improved their SL learning, their SL speaking and subject learning progress was less rapid and comprehensive than local teachers may have appreciated. The article concludes with some conceptual and practical implications for teachers of second language RMB students, for their continued awareness of RMB learning needs within the classroom environment.

### Introduction

For Asian refugee-migrant-background (RMB) adolescents, the challenge of learning within a principally monolingual New Zealand culture, while maintaining their first culture, is a particularly complex process (Hamilton & Moore, 2004; Marete, 2011; Warsame, Mortenson, & Janif, 2014). New Zealand's population is now very diverse (Barnard, Torrez-Guzman, & Fanselow, 2009), but the need for more acceptance of diversity is obvious and increasing. Human Rights Commission (2012) research shows that in New Zealand society, Asians are the second most discriminated against group, with refugees coming fourth. Haworth (2011) and Ward and Liu (2012) indicate that New Zealand schools follow national attitudes of slow change towards diversity acceptance. Though the Ministry of Education (2015b) provides comprehensive guidelines and funding for RMB students' needs, its statutory "hands off" role with schools can allow widely divergent implementation of RMB support (Ibrahim, 2012, p. 220). In spite of

repeated calls for the implementation of a national language policy for "a fair go for all" (East, Chung, & Arkinstall, 2012, p. 17), consecutive governments have been unwilling to process this potential guide to schools for increased diversity acceptance.

These political realities compromise the legitimacy of RMB students in secondary schools.

Within schools, a further problem for RMB adolescent students is time-bound: they are under pressure to accelerate both Basic Interpersonal Communicative Skills (BICS) as well as Cognitive Academic Language Proficiency (CALP) (Cummins, 1989) to achieve as much as possible before they turn 20. The New Zealand educational practice to automatically promote secondary school students each year disadvantages RMB students, whose English levels are often below that of the local age-group students. This has the potential to cause resentment in class from teachers and mainstream students alike because of intensified RMB classroom needs, to isolate RMB students from class interaction, put them under critical pressure academically, and contribute to them abandoning their studies. To succeed in the New Zealand education system, RMB students need to underpin their educational progress with their own scaffolded supports.

This article draws on a wider study which examined Bhutanese RMB students' perceptions of their learning. The study suggests that first culture family, background and community values have a major impact on students' SL learning. The study also recognises the close association between language, culture and identity, and acknowledges the difficult reshaping of identity involved during SL learning. For the Bhutanese RMB students, SL learning is not only a "commodified" cognitive exercise to be catered for by Western-education literacy strategies. It is a socially contested, non-linear site for identity reconstruction, where selected aspects of SL culture, espoused by first culture family, are fused into the bedrock of first culture selves.

This article aims to enquire into one aspect of the above research: RMB students' perceptions of the way friendships assist their SL learning progress.

### **Research Framework**

To account for Bhutanese RMB students' perceptions of the ways they choose and maintain friendships to facilitate learning, this article advocates the qualitative, post-structural concept of investment. Norton (2012a) describes this model in relation to second language learning as "the socially and historically constructed relationship of learners to the target language" (p. 50). Learning a second language is a means of trading for SL resources where learners "acquire a range of symbolic and material resources which will in turn increase the value of their cultural capital and social power" (Norton,

2012b, p. 6). Consequently, intercultural friendships have a pragmatic element; they can act as tools for obtaining academic advancement and access to community networks.

In the process of obtaining friendships, SL learners' identities are contested by the target culture, within the wider historic, economic and socio-political structures in which they live, and through "everyday encounters between people with differential access to symbolic and material resources" (Norton, 2000, p. 7). Speech interaction allows SL learners to exchange information with native speakers who rearrange "a sense of who they are and how they relate to the social world" (Norton, 2000, p. 11). As negotiation occurs, social hierarchies confer "the right to speak" as well as "the power to impose reception" (Bourdieu, 1977, p. 648) conferring various levels of sanctioned legitimacy, setting boundaries to safeguard vested power hierarchies.

In the struggle for new identities, SL learners also delineate their own roles and relationships with others. Initially, spoken language restrictions may minimize SL learner school friendships; silence can "protect(ed) them from humiliation" (Duff, 2002, p. 312). Protection may also be provided with imagined communities (Norton, 2012a) allowing L2 learners to align themselves to their L1 community through dreams which they own and control. SL learners may suffer an ambivalence between their desire to learn, and to relate to others in the SL learning environment where the teacher, classmates or school system may be unsympathetic towards their first culture (Duff & Talmy, 2011). More resilient SL learners may develop friendships for a set time and purpose, with accents which are carefully constructed to avoid being targeted by SL classmates as "a communicative burden" (Miller, 2003, p. 48), while also maintaining loyalty to L1 culture (Golombeck & Jordan, 2005).

Learners may become exhausted in the tightrope act of maintaining different personas between home and school (Hemmi, 2014). Their family relationships may be affected if parental authority is weakened through lack of knowledge about SL language, social networks or school requirements, possibly leading SL learners to develop disrespect for family religious, cultural or social guidelines (Pavlenko, 2001). In particular, L1 female gender expectations and marriageability status may conflict with increased SL school learning freedoms (Ek, 2009; Pavlenko & Pillar, 2001; Skapoulli, 2004). If SL social pressures become too great, and first culture supports weaken too much, students may succumb to subtractive bilingualism (Cummins, 1989; Kouhpaeenejad & Gholaminejad, 2014), where L1 relationships are diminished in favour of SL peer friendships. RMB relationship choices exemplify the cost of the "multiple, contradictory nature of learner identity" (Norton, 2000, p. 127).

The significance of the investment construct for the present study is clear when it is recalled that the process of identity renegotiation with SL learning at school exists

parallel with people closely associated with SL learning efforts, such as other students of English for Speakers of Other Languages (ESOL) and their teachers. The likelihood of friendships developing with people with whom the RMB students have a strong investment is heightened if the wider SL cohorts share a selected site space, where its inhabitants mutually support SL educational progress, and there are opportunities to interact for resource exchange, as the following study illustrates.

### The study

This article is derived from a larger qualitative study (McCarthy, 2015) which occurred over two years at one New Zealand composite, co-educational school. It investigated Bhutanese second language students' perceptions of their learning, backgrounded by their parents' and teachers' perceptions, and identified factors that facilitated or limited their learning progress. Ethics approval was granted for the study by the site school and Massey University. Informed consent was obtained from all participants. The ESOL homeroom was used as the student data collection site on afternoons when participants were already regularly gathered for homework purposes.

All 12 Bhutanese students from the school became participants, and for confidentiality purposes, were given pseudonyms (Appendix 1, p. 18). All were born in refugee camps in Nepal, and all had arrived in New Zealand from 2008 onwards. Nine of the participants were from two extended families. At the time of data collection (2013) they were living near each other. Their ages ranged from 12-20 years, and educational levels spanned Year Seven to first year at university. Data collection methods consisted of initial student participant questionnaires, observations of four different one-hour classes for each student, recess time observations, semi-structured student focus group interviews at the beginning and end of data collection, and interviews with each of the 12 students. Focus group and individual interviews from teachers and parents provided a background context for student attitudes. All interviews took between 40 and 100 minutes, and all included questions common to all participants, but not expressed uniformly.

All data was taped, transcribed in sequence and then analysed manually using grounded theory methods (Charmaz, 2014; Creswell, 2007). Different colours, underlining and fonts were used to highlight recurring topics and participant attitudes, while side notes added analysis. Reflective journals or "think pieces" (Saldana, 2011) were used during each stage of the interviews for each method and participant (p. 98). Eventually, multiple topics like "Participant Inclusion and Exclusion" were subsumed into theory choices. With each data collection exercise, new material extended and deepened researcher awareness of the complexities involved in SL learning, ultimately producing a cross-textual range of highly-personal, dynamic perceptions within standard interview guides.

The subsequent findings uncovered a potent participant commitment to first culture, which had survived both the family diaspora from Bhutan and refugee camp childhoods in Nepal, and which permeated attitudes to friendship for learning in New Zealand.

### Pathways to SL learning through friendships

The following subsections discuss participants' perceptions of the influence of friendships on RMB student learning, organised roughly into transitional groups (Miller, 2003).

### Starting Up

Initially, RMB participants' physical appearance did not particularly alienate them from local interactive opportunities. In uniform, the students looked like smaller versions of familiar Pasifika students. However, under the surface, there were more significant issues.

Participants suffered an intense psychological distress for up to two months, what McBrien (2005, p. 340) called "emotional and cultural bereavement," which silenced them as their former identities were assaulted. Kali was "really lost" (Student Individual (SI): 1); Narayam described the sounds he heard as "muted" (SI: 6) as if in a daze. RMB students experienced fear and confusion over the complexity of school buildings. Kaudani felt physically intimidated by taller and stronger "white" (SI: 8) people. Participants feared hostile treatment from teachers or being duped by other students into adopting dangerous behaviours so their family would be shamed. Other fears focused on appropriate communication. Sunu stated: "When I first came here I feel shy cos maybe they are teasing me or say something 'Oh your English is too bad' or something like that" (Student Group (SG): 1). Students couldn't decipher whether the communication signals locals expressed were supportive or not, and were unable to reply. This stressful psychological displacement, expressed in "stoic silence" (Pon, Goldstein, & Schecter, 2003) was thankfully only temporary, and perhaps provided motivation for learning English quickly. Gradually students moved to more "attentive silence" (Pon et al., 2003) when they began to untangle sound differences to increase understanding.

The RMB student journey, from silence to speaking English, required considerable cognitive and affective effort. The first hurdle was learning the vocabulary to communicate, initially with simple words and sentence fragments developed from the refugee camp English classes or SL playground interactions. Sunu used formulas like "How do I say?" (SI: 3) to ask for help in class. Nilu voiced that learning slang early was her gateway into adolescent friendships: "Kiwi people use that so often" (SI: 10). Karicha was well aware that possibilities for friendship depended on vocal skills "when you...can speak English fluently" (SG3: 2). The pressure to learn quickly was intense.

Once words could be used, participant speech expression created difficulties for local listeners because of their speed, articulation, vocabulary choice, absence of local ellipsis and colloquialisms, and most significantly, accent markers. All participant levels were afraid of being teased by class members about their camp-generated accents learnt from Indian-trained teachers. On first arrival, Parveesh and Nilu spent many hours practising Kiwi accents after school. Unia was aware of local classmates' annoyance at the time-lag before she could construct responses. Other ESOL students were used for practising English, as Karicha explained, because "they know how it feels when you first came here, and when you can't speak English" (SI: 2).

Early positioning with teachers created complications in classroom communication. For participants, first culture discourse norms (Carbaugh, 2007) demanded formal and weighty respect for teachers. Participants treated refugee camp teachers with respectful reserve, even fear (McCarthy, 2015). In New Zealand they initially transferred this pattern by circumventing local staff, avoiding eye contact and using lip service instead of clarifying their needs. Sunu explained: "I don't understand what teacher is explaining when they say, 'Do you get it?' 'Yeah yeah' but actually I did not get it." (SI: 3). Mrs. Richardson highlighted the exasperation that local teachers felt when she stated "what with the nodding and smiling...it's quite difficult to actually get beyond that" (Teacher Group 2: 18). It took some time for RMB students to accept patterns of Kiwi familiarity with staff. Teachers too, took time to accommodate RMB students and their learning supports in mainstream classrooms, where newcomers were expected to use English intelligible to locals.

### On the Road

Friendship between Bhutanese students was an invaluable first step towards making school connections. Nilu explained:

They (Bhutanese) are really shy...they won't know English as much...some people find it hard to understand their accent...so for Nepali people it's easier to communicate with Nepali people. (SI: 10)

Participants looked for opportunities to connect with each other, to discuss the meanings of classroom requirements, especially if the teacher-aide was unavailable to "ask the dumb questions!" (Teacher group (TG) 1: 19). During recess they supported each other with home-cooked food, reviewed their school experiences and explored imagined communities. After school, senior female participants helped other Bhutanese with homework, their parents able to give only limited assistance because of restricted English knowledge or inexperience with the New Zealand education system.

Bhutanese helping Bhutanese however, was not without problems. ESOL staff noted:

They are trying to listen but they miss the important thing. Teachers say it too fast to start with, and then say, 'I've explained it; now you get on with it.' (TG1: 19)

Students could then make mistakes helping each other "reinforcing what is wrong" (TG1 19). Along with other ESOL students, their presence could also provide a sense of threatening "otherness" in the class, as Mr. Liam implied:

I've got...eight ESOL students in my class, and they tend to group together... I think it's not sort of *ghettoization* or anything, I think it's just because in the ESOL room they just know each other so well (TG2 18).

Nevertheless, Bhutanese friendships were an invaluable early method to assist learning.

Originating in ESOL classes, friendships with international fee-payers provided participants with the chance to step outside their own culture. Both groups were navigating SL academic achievement within a monolingual educational environment. Some fee-payers had ambitious future plans, and it was these students that senior female RMB participants aligned with for mutual learning advantage. In particular, one participant used fee-payer friends to engineer her seating to gain optimum learning benefit in class, stating:

If I don't have friends then I choose to sit in the front, but if I have friend I just used to sit in the middle...if we don't understand then we can just do the question and ask our friends (Student Group (SG) 1: 5).

Ryan (2000) demonstrates that "students with high-achieving friends showed greater increases in achievement over time compared to students with lower achieving friends" (p. 104). After three years, Khusi even became the elected spokesperson for less articulate international students in Year Thirteen Commerce. Her friendship strategies were followed by Sunu and Kamba, who recalled life-jacket links with fee-payers during their painful first experiences of mainstream classes.

Participants also developed school friendships with Pasifika students. Both shared a similar appearance and used another language and culture with families at home. Karicha noticed that Pasifika and RMB participants had a similar respect for teacher authority and classroom quietness. Senior Kali's comments represent appreciated friendship bonds with Pasifika girls sharing classroom spaces and small group work: "They are really nice and helpful...it's really hard to ask and I always get stuck. They explain me what to do and then how to do it." (SI: 1)

The ultimate step for participants with learning English was to become friends with locals. Khusi explained: "We can know the other culture, if we have the other culture's friends... it's easy for us to react with the other people also" (SG1:5). However,

participants mixed less with locals than ESOL students. It was also in local friendships that RMB first culture gender differences were most evident. Parent-sanctioned opportunities for RMB boys to bridge local friendships was expressed with their involvement in school clubs, and after-school sport. Narayam's shared focus with a local student in Robotics spilt over into friendship out of class. Both Kaudani and Parveesh enjoyed bonding with locals in soccer, especially when a South American coach recalled his visit to Nepal. Conversely, RMB girls did not join in team sports clubs after school. Neither did senior girls frequent the common room; they frequented the ESOL room, supporting other students, completing schoolwork and maintaining female friendships. For them, friendships with locals tended to be class-room based, the "field habitus" (Miller, 2003, p. 46), where there were clear relationship boundaries for both sides. Interaction could be sanctioned through helpful L2 teachers, willing to engineer a cultural boundary bridge, using their higher authority to reduce underlying social tensions. In Sunu and Unia's English class, their mixed-culture, teacher-organised group united to obtain teacher attention by waving arms and singing, mixing humour and collegiality to become a visible power base for mutual benefit.

Mathematics was the subject where participants of both genders interacted more with local students. Bhutanese cultural capital, in the form of advanced Mathematics knowledge, could be used in exchange for offers of friendship. Khusi recalls being asked by the Mathematics teacher to help other students, which began her route out of isolation. Sunu also recalled the disarming sensation of trading Mathematics expertise with group inclusion: "They are like 'Oh come and sit with me' and I think 'Oh they are...wanna be a friend with me'...and I helped some of them...if I know" (SI: 3).

Participants accepted the brokerage of this Mathematics exchange, but were still not always able to understand or trust local reasons for friendship otherwise. Khusi reflected: "Sometimes they become quite nice, and sometimes they don't. I can't work out why; I still can't work out why" (SG1: 5). Speaking with locals was a risk. Local student responses suggested that they chose to protect their vested social boundaries. Participants too, kept boundaries to protect the primacy of their Bhutanese culture identity.

### Potholes on the way

All RMB participants were very careful to avoid confrontation with other students. Physical and emotional distancing were the main strategies advised. Parveesh managed by accepting accent jibes:

My accent wasn't good and my friend used to say 'Oh you're funny man this accent' and sometimes they used to not mock but repeat the words I say, just make funnier (SI: 11).

By laughing with, not against, his friends, he was able to bond with local males, but it also meant that he had to subjugate his Bhutanese identity in a way other Bhutanese were not prepared to do.

Participants avoided disclosing their ex-refugee status, for fear of being socially targeted as 'losers'. Kali explained: "When we say we are refugee, they start to tease us, it affects our study. We feel depression. We might lose a lot" (SG3: 1). Parveesh wryly explained that he now accepted being called a refugee, but only now that he was no longer one:

the only part really sad was... just saying we are refugees...but now since we came to NZ...we got the permanent residence in NZ, but...it's good to be a refugee I guess ...that's how I was born (SI: 11).

Actually, participants legally lost their refugee status on arrival in New Zealand, as they gained permanent residence as part of the quota intake. The commonly-used word *refugee* was tainted with the stigma of needy poverty, grading them as lower status than more affluent international fee payers.

Participants realised that to position themselves to develop friendships, they needed to understand that, partly because of limited news about Bhutan and Nepal in the national media, few New Zealanders knew anything about the political events causing the diaspora, and often showed minimal interest. Karicha realised: "People don't really care about our culture...people don't ask" (SG2 2). Participant ebullience was a major factor in developing local friendships, to compensate for any apathy or antipathy.

Sometimes the desire to become part of the local peer group became too strong, jeopardizing future learning and family relationships. Taylor (2013) states: "Many adolescents feel that adults cannot understand them...friends of a similar age can provide the emotional support and the mutual understanding necessary in honing teenager's socio-integrative skill" even though "youth will pay undesirable prices in order to gain acceptance" (p. 14). Withdrawal from family links and reduced academic achievement are indicators of subtractive bilingualism, where "language learners give up their lifestyle and values in favour of those of the target language group" (Norton, 2012a, p. 154). Khusi, clearly aware of the dangers, observed: "It's good to make friends, like Kiwi friends...but not too much in other way" (SG1 5). Parveesh, keen to bond with his male peers, was less wary, and his academic trajectory declined over three years until he left secondary school for another educational establishment. Nilu jockeyed for a top place in the classroom social hierarchy, lured into becoming friends with risk-taking local girls. She explained:

the naughty girl...is really popular in the school. We used to hang out outside the class...having friends really helped; it's just the first year and I already made like friends with 50% of the Year Nines (SI: 10).

Nilu's grades steadily reduced over two terms, but her parents and teachers helped salvage her learning issues. This process included Nilu compromising her Kiwi friendships and reinvigorating her first culture ones, saying "Me, Khusi, Kare and Kamba are best friends" (SI: 8). Both Nilu and Narayan's experiences illustrate the tensions involved with balancing invested SL friendships, often unacknowledged or misunderstood by local students or teachers in a dominantly monolingual school community.

### **Discussion**

The examples presented in the previous section highlight instances of friendship as a SL learning tool. Its limitations and benefits shall now be considered.

For the RMB participants, SL friendships were complicated by the need to adjust individual psychological balance, by family pressure for solidarity and by L1 community expectations of loyal role-modelling to protect its future health. Hurburun (2008) states that:

Language maintenance...facilitates the psychological adjustments of immigrants and their families. Language is a representation of one's country and one's native tongue, and is often viewed as a symbol of cultural pride...and as a means of enhancing family cohesion (p. 39).

Learning English was a threat as well as an advantage; if allowed to dominate, it could destroy L1 language and culture. Roberts (2005) observes: "For those who do not intend to participate in the process of assimilation, boundary maintenance becomes an allimportant exercise" (p. 262). Kali fiercely expressed the Bhutanese community's views: "We need to think about whether we are going to lose our tradition or culture or not. And we need to make balance, both of them" (SG3: 1). Most RMB students followed family guidelines to avoid first language loss. The regulation of Nepali only at home, maintenance of gendered cultural values, and attendance at first culture religious and community events, fostered same culture friendships. First culture gender values particularly constrained female relationships, and prevented easy access to local friendships during and after school. RMB male access was assigned to in-school clubs and soccer. Consequently, there were minimal opportunities to develop SL friendships in wider sporting, cultural, religious and social spaces taken for granted by Kiwis. First culture practices and lack of English also meant that there was lack of opportunity for intercultural parental friendships which could foster friendships amongst offspring (Hamilton, 2004). This meant that RMB students could not access wider influential social and power networks which could improve learning assistance.

RMB friendships were also restricted by teacher management of subject, class selection and individual teacher response to refugee minority culture. RMB students already faced uphill academic battles to improve academic writing without a childhood of using English frequently, and with limited time to develop necessary specialist vocabulary required (O'Rourke, 2011; van den Bergh, 2007; Windle, 2009) while competing with native speakers who were "constantly improving their language proficiency in mainstream classes" (Gearon, Miller, & Kostogriz, 2009, p. 8). The opportunity for developing helpful friendships was markedly weakened if teachers isolated RMB students from each other, or placed them in inappropriate or unchallenging classes without buddies or support. No mainstream teachers in the site school had ESOL training. By unwittingly using "racial and ethnic cues" (Miller, 2003, p. 48), to combat the difficulties of extra RMB needs, teacher disaffection could also create a "negative snowball effect" (Hamilton, 2004, p. 87) on classmates' acceptance of RMB students, modelling relational distance. Researcher observations noted that Narayam was placed at the back of his class, isolated. Karicha advised avoiding the manipulations of classmates because of teacher targeting: "If you talk to them and they keep talking to you, even after teachers get mad...you get in trouble; that happened to me many times" (SI: 2). Teacheraides or bilingual tutors could be of greatest assistance when welcomed by teachers, and used primarily to assist RMB students, not teacher classroom needs. Without teacher relational, administrative and content support, it was easy for RMB students to comply with low academic expectations.

RMB friendships did provide successful learning support in that they cemented links with RMB newcomers, using bilingual explanations for procedures and classwork. Once settled, Bhutanese students supported each other and ESOL friends by collaborating within the same subjects and classes where they could, and using internal assessments so they could take more time and effort to access learning. RMB lunchtime and after-school groups could gather to galvanise resilience with discussion of future professional imagined communities as well as practical learning realities.

May (2002) stated that specialised home-room care for L2 learners possibly "ghettoises" them (p. 20). However, the idea is disputed by others like Franken and McCormish (2003); Sobrun-Maharaj, Tse, Hoque, and Rossen (2008); White, Watts, and Trlin (2002), and the student participants in this research all claimed the ESOL homeroom as a valuable site for their friendships and learning progress. Here, RMB friendships were nurtured in the safety of available pastoral and specialist academic services, shared ESOL classes and individual tuition. The room gave participants the choice to use what Simpson (2008, p. 388) called "go-between(s)" with SL learning needs, to save face with mainstream teachers or students, to access classroom sub-groups and constrain peer pressure.

One of the most rewarding aspects of RMB friendship was the opportunity for local students to invite participants to trade their learning skills for limited friendships, such as with Mathematics and English. The participants were particularly thankful to individual ESOL staff for their expectations and support, and identified very helpful mainstream teachers in Commerce, English, Mathematics and Foundation Studies classes. The goodwill generated enhanced RMB sense of legitimacy. By valuing the opportunities for interactions with locals where they occurred, the participants went a long way to reducing tensions created by forces more indifferent to them.

### **Implications and Conclusion**

It is important to acknowledge the limitations in this study, predominantly research into one adolescent minority culture cohort from one regional New Zealand school. These factors produced a very specific cameo of refugee learning experiences, though their accounts of friendship patterns as a personal agentive response to learning needs resonates with other ex-refugee research (Sobrun-Maharaj et al., 2008). The nuanced view enabled by close attention to a small group allows insight that may be difficult to derive from a broader survey.

One major implication for schools is to increase RMB professional development for mainstream staff, assisted by basic Ministry guidelines and funding (Ministry of Education, 2015a). Led by senior management, a quota system for annual SL scholarship uptake, based on numbers of RMB students in each school, would improve the likelihood of this implementation (Newton, Yates, Shearn, & Nowitzki, 2010). Teacher workshops could build greater awareness of RMB cultural and educational backgrounds and RMB style and strategy needs, and assist in the creation of multi-cultural and bilingual curriculum material. Where larger numbers of RMB students use the same first language (L1), L1 lessons could be incorporated within modules. Support for appropriate RMB class placement, buddy systems, efficient use of bilingual tutors and teacher aids, and small group class structuring, would increase opportunities for RMB friendships and learning.

For ESOL staff, the "gate openers" for RMB students, the need for professional development is even greater, to maintain expertise with systems such as relevant bilingual starter-pack information, initial testing, differentiated ESOL curriculum structures, and guidance with bilingual tutors and teacher aides. ESOL staff are also encouraged to become "brokers" (Wenger, 1998, p. 108) for RMB students with mainstream staff modelling trust and respect (Wilcox, 2012) through bilingual pastoral and academic care, effective parent-school links and encouragement of visible integration of RMB diversity into the wider school. Finally, it must be noted that ESOL staff support of RMB invested

friendships is not an easy option within today's politicised school environments, and needs reinforcement from trusted ESOL department members, willing staff and school management for effectiveness (Hamilton, 2004; Loewen, 2004). However, without specialist ESOL nurture, support for RMB student relational learning needs would be even less accommodated, and provide little of the ballast needed to combat the realities of educational inequality (Rashbrooke, 2014).

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### Appendix 1: Participants

### A: Bhutanese Student Participant Details

Pseudonym	Gender	Age	Months	Secondary	Data
			in New	school	code
			Zealand	class	
Kali	F	18	17	Yr. 12	1
Karicha	M	14	17	Yr. 10	2
Sunu	F	16	17	Yr. 11	3
Kamba	F	13	21	Yr. 7	4
Khusi	F	20	47	Tertiary	5
Narayan	M	13	47	Yr. 8	6
Unia	F	16	31	R 11	7
Kare	F	12	31	Yr. 9	8
Kaudani	M	19	31	Yr. 13	9
Nilu	F	13	45	Yr. 9	10
Parveesh	M	17	45	Yr. 12	11
Asis	M	13	47	Yr. 7	12

<sup>\*</sup>The months in New Zealand and age for each child are at the time of commencement of the research.

## B: Bhutanese Adult Participant Details

Pseudonym	Public role	Participant link	Data code
Mr. Prem	Bi-lingual tutor	Tutor	13
Mr. Himal	Community leader	Father	14
Mr. Ramesh	Bi-lingual tutor	Father	15
Mr. Nam	Bi-lingual tutor	Brother	16

### C: Teacher Participant Details

Pseudonym	Teaching role	Participant link	Data code
Mrs. Lightfoot	Sport, Projects	Mainstream teacher	17
Mr. Barrett	Mathematics	Mainstream teacher	18
Mrs. Cable	ESOL	ESOL teacher-aid	19
Mrs. Richardson	English	Mainstream teacher	18
Mr. Curtis	Commerce	Mainstream teacher	20
Mrs. Goldeye	ESOL	ESOL teacher	19

# NEW ZEALAND TEACHER COGNITION OF PRONUNCIATION TEACHING: SURVEY RESULTS

### Graeme Couper Auckland University of Technology

### **Abstract**

Reports from a number of countries have suggested teacher education programs are failing to adequately prepare teachers to teach pronunciation. They have also pointed to a lack of research into teacher cognition, that is, their knowledge, beliefs and practices. This article reports on a survey of New Zealand teachers' views on pronunciation teaching. The survey, hosted on Survey Monkey, attracted 83 responses. It provided data on teachers' views on training, the importance of teaching pronunciation, confidence in their ability to teach it, how often they taught it, which features were prioritised and how they responded to errors. While it was found that teachers felt pronunciation was important, this was not fully matched by levels of confidence in being able to teach it. Other results also suggest the situation in New Zealand is similar to that in other contexts and the implications for teachers, teacher educators and researchers are discussed. This survey is part of a broader project investigating pronunciation teaching in New Zealand through interviews and classroom observations.

### Introduction

There is growing recognition of the importance of understanding teacher cognition, and the need to understand more about it, as evidenced by the recent special issue in *The Modern Language Journal* (Kubanyiova & Feryok, 2015). Teacher cognition refers to teachers' beliefs, knowledge, and attitudes, and how these are reflected in classroom practice. To date the majority of research into language teacher cognition has focused on grammar teaching or language teaching in general with little attention being paid to pronunciation (Baker, 2014). An increased understanding of teacher cognition can help teachers reflect on their own practice as well as prompt teacher educators to re-evaluate their pre- and in-service programmes. It also has implications for textbook writers and curriculum designers, and it can help to inform researchers as to where there are gaps in the field requiring further investigation.

### **Teacher cognition research**

A number of investigations have suggested that pronunciation is neglected as a result of teachers lacking the confidence to teach it (Baker, 2011; Couper, 2016; Foote, Holtby, &

Derwing, 2011; Macdonald, 2002). This neglect can be traced back to insufficient training and professional development opportunities (Burns, 2006; Couper, 2016; Foote, Trofimovich, Collins, & Soler Urzúa, 2016; Henderson et al., 2012; Murphy, 2014). Teachers have suggested there is insufficient focus on pronunciation in curricula and textbooks (Breitkreutz, Derwing & Rossiter, 2001; Couper, 2016; Macdonald, 2002), a deficit which also contributes to pronunciation teaching being neglected. Underlying all this is the lack of research, at least until recently, which could usefully inform teachers with regards to what they should teach and how. Although advances have been made since 2005, there are still gaps in knowledge (Thomson & Derwing, 2015) and it takes time for new knowledge to filter through to teachers, teacher educators and curriculum designers and textbook writers.

Teacher cognition research has also reported on which features are being taught, whether the goal is to achieve native speaker norms or intelligibility, and if, how and when pronunciation is taught and corrected. It has been found that teachers tend to focus more on individual phonemes than on suprasegmentals, i.e. features above the segment or phoneme level such as connected speech, stress, rhythm and intonation (Burns, 2006; Couper, 2016; Foote at al., 2016). Teachers see these suprasegmentals as important but they tend to ignore them because they find them too difficult to teach (Baker, 2011; Burgess & Spencer, 2000; Couper, 2016; Foote et al., 2011). Surveys in Europe (Henderson et al., 2012) suggest teachers still tend to favour native speaker norms as their goal. However there seems to be growing recognition, at least in principle, that a goal of comprehensibility, or ease of intelligibility, is more appropriate given the reality of what learners can achieve and learners' needs for English as a *lingua franca* (Couper, 2016; Grant 2014). Although most teachers believe pronunciation should be taught, they tend to have a fairly limited repertoire of techniques, generally centred around listen-and-repeat activities (Foote et al., 2016). However, Baker (2014) and Couper (2016) reported a broad range of techniques amongst highly experienced teachers. It has also been found that pronunciation teaching is not generally planned into the lesson; instead, it occurs as correction, typically as a recast, in response to learners' errors (Foote et al., 2016). Couper (2016) also found that 18 of the 28 teachers he interviewed in Uruguay taught pronunciation on an *ad hoc* basis in response to errors.

### Pronunciation teaching research

Recent advances in research have provided a number of answers, or at least guidelines, in response to some of the questions raised in teacher cognition research. In terms of what should be taught, Derwing and Munro (2015) underline the importance of teaching both segmentals and suprasegmentals, and Grant (2014) adds broader aspects such as paralinguistic features, pace and voice quality to the list. It is now widely accepted that intelligibility and comprehensibility are generally more appropriate goals than native

speaker norms. While there is still a need for more research in order to establish what impacts on intelligibility and comprehensibility, word and sentence stress and thought groups have been found to be important at the suprasegmental level. At the segmental level, Catford's (1987) functional load principle suggests the relative importance of individual phonemes (Derwing & Munro, 2014), that is, mistakes with some phonemes, such as /p/ and /b/ in word initial position, disrupt communication more than mistakes with other phonemes, such as /s/ and /z/ in word initial position.

Research has shown that pronunciation teaching can be effective (Thomson & Derwing, 2015) and that it should be taught explicitly at all levels (Zielinski & Yates, 2014). The question of type of instruction has generally been limited to explicit versus implicit or focus-on-form versus focus-on-meaning but these approaches have not provided enough detail to accurately describe what it is that makes teaching effective (Lee, Jang & Plonsky, 2014). However, Fraser (2006) and Couper (2011) have addressed this question from the theoretical position that learning L2 phonology involves learning new concepts. Drawing on cognitive phonology (Mompean, 2014) and insights from socio-cultural theory (Lantolf, 2011) they have provided evidence-based descriptions of what it is that is crucial in effective pronunciation teaching. These include the use of critical listening, where the learner focuses "on the contrast between a correct (or appropriate) pronunciation versus an incorrect (or inappropriate) pronunciation within a particular communicative act" (Fraser, 2009, p. 301) and socially constructed metalanguage in which the teacher begins with the learners' perceptions and the class co-constructs its own naïve language to talk about the relevant phonological concepts (Couper, 2015).

Research into error correction has found that it can be effective, especially when it is explicit and relates back to prior pronunciation teaching (Saito & Lyster, 2012). Lyster, Saito, and Sato (2013) found that recasts are the most common means of providing feedback but suggest they are not always effective and propose that teachers should give feedback in different ways. They analyse feedback types on a spectrum from implicit to explicit and then divide feedback into either prompts or reformulations. Therefore reformulations run from an implicit recast to explicit correction with explanations, while prompts run from a clarification request through to providing a metalinguistic clue in order to elicit the correct form. Raising awareness has an important role to play in providing feedback and peer correction can assist here so it is to be encouraged (Derwing & Munro, 2015). Finally, there have been a number of recent publications bringing together much of this research. These are: Grant (2014), Derwing and Munro (2015), and Reed and Levis (2015). Together, they provide a thorough review of the state of research in the field of pronunciation teaching.

#### **Aims**

The aim of this article is to report on the participants' attitudes, beliefs, and practices with regards to teaching pronunciation, and at the same time, in discussing those responses, to remind or inform the reader of the knowledge possessed by both their colleagues and researchers who have investigated pronunciation teaching. It is hoped that this will prompt teachers to reflect on their practice as well as offer suggestions for education providers, curriculum developers and textbook writers, and researchers.

### Method

The survey used in the study (See Appendix 1) is adapted slightly from one used in a similar project undertaken in Uruguay. It collects information on the participants' backgrounds and experience, their views on their own teacher education experience, how important pronunciation is perceived as being along with confidence in one's own pronunciation and the ability to teach it. It also asks how often they teach it and which aspects of pronunciation they focus on. Finally it asks about error correction in terms of timing and frequency as well as techniques used. It makes use of both closed and open questions. The survey itself was run through Survey Monkey.

Participants were recruited through the TESOLANZ newsletter and an announcement on the TESOLANZ website. Other channels were also used such as my own contacts within the Auckland branch of TESOLANZ, direct requests in relation to oral presentations I was involved in, and approaches to directors of studies in language schools.

### **Participants**

In total, 83 English language teachers completed the nationwide survey. Clearly, those who took part already had some interest in pronunciation teaching so they are probably representative of those who are quite aware of pronunciation and who have made some effort to find out about it and how to teach it. Consequently the results cannot be said to represent the views of all language teachers in New Zealand. The vast majority of respondents (91%) were currently teaching adults in language schools and tertiary institutes. But many had also had quite a lot of experience in different contexts, for example 35% had primary or secondary school teaching experience and many had taught various subjects in a range of different contexts in different countries. The participants also represented a great deal of language teaching and life experience (See Table 1) with the majority being over 50 with more than 10 years' language teaching experience. As can also be seen in Table 1, the majority have Diplomas or a Master's degree in language teaching and most have a post-graduate qualification. Thirteen of the respondents were also working towards higher ELT qualifications including two PhDs, one EdD, one MPhil, one Masters, and 8 Diplomas.

Table 1:
Age, ELT experience, ELT qualifications, Highest academic qualification

Age (N=82)	<30 = 3 (4%)	30–39 =7(8%)	40-49 =14(17%)	50+ = 58 (71%)
Exp (N=80)	<2yrs = 3(4%)	2-4=5 (6%)	5–10 = 14 (17%)	10+ = 58 (73%)
ELTQuals(N=79)	Cert=26(33%)	Dip = 32(41%)	Master=20(25%)	PhD = 1 (1%)
Top Qual(N=81)	Other= 7 (9%)	B = 26 (32%)	PGDip=16(20%)	Master=32(39%)

The majority of respondents (77) had English as their L1, but other L1s were also represented (one speaker each of Afrikaans, German, Portuguese, and Vietnamese). It was also interesting to see that only a minority were completely monolingual (14%), with a further 33% being able to speak another language at an elementary level, 28% at an intermediate level, and 25% at an advanced or native level (self-evaluation). Nearly half of respondents were able to speak 3 or more languages, with one naming 9 languages (although, this was counted even if only at an elementary level).

### **Data Analysis**

The data, collected through Survey Monkey, was collated for statistical analysis using SPSS (Statistics Package for Social Sciences). As already noted, the sample was self-selecting and the analysis of the participants' backgrounds suggests they are unlikely to be representative of all English language teachers, but rather, of experienced and qualified teachers with a particular interest in pronunciation. An initial analysis of the results also shows that they are not normally distributed. With this in mind, there is little to be gained through the use of inferential statistics and parametric tests, however the descriptive statistics presented here are considered sufficient to provide a clear picture of the knowledge, beliefs and attitudes of this group of teachers.

In addition to the closed questions, leading to descriptive statistics, the responses to the open-ended questions provide a significant amount of additional data with which to further clarify the findings. The comments in these open sections have been coded according to the different themes they represent where they help to complete the description of participants' views and experiences.

#### Results

### Adequacy of training

While 40/82 (49%) respondents said they had learned enough during their training to be confident teaching pronunciation, 20 (24%) were not sure and 22 (27%) claimed that they

had not learned enough. Participants were then asked what, if anything, they wished they had learned. There were 55 responses to this open-ended question and they have been grouped according to common themes that they appear to represent. The themes largely cover the pedagogical and content knowledge one would expect to have in order to be able to teach pronunciation, but clearly not all respondents had learned this during their training. The themes were:

- The need to know how to teach pronunciation (15: 27%), especially in terms of particular techniques and activities that might be used.
- A lack of knowledge of both the phonology of suprasegmentals (i.e. features above the phoneme level, e.g. word and sentence stress, intonation etc.) and how to teach them (14: 25%).
- A lack of knowledge of phonetics and phonology of phonemes, their physical production (articulation) and how to explain it to learners (9: 16%).
- The desire to know more about learners' L1 differences and related potential problems (N=5: 9%).
- How to integrate pronunciation into classroom teaching (N=4: 7%).

Other issues and concerns raised included error correction, different types of English, use of IPA, and proficiency with phonetic alphabet.

### Confidence, Value and Attention to pronunciation

Not surprisingly, given that most respondents had English as their L1, confidence in their own pronunciation was rated highly (57 (71%) strongly agree, 20 (25%) agree, 1 disagrees and 2 strongly disagree). This is equivalent to a mean of 3.65, where agree=3 and strongly agree=4 (See Figure 1). The respondents strongly believed that it was important to teach pronunciation with all either agreeing strongly (59/80=74%) or agreeing (21/80=26%). While such strong agreement may be a result of only teachers who felt pronunciation was important bothering to complete the survey, this acknowledgement of its value was not translated into confidence in ability to teach it (28=35% strongly agree, 46=57% agree, 5 =6% disagree and 1 strongly disagrees). Overall, this translates into a mean of 3.74 for the importance of teaching pronunciation compared to a mean of just 3.26 for confidence in ability to teach it.

Participants were also asked how often they teach pronunciation on a one to four scale of rarely (0), sometimes (10=13%), often (37=46%), every class (33=41%). This equates to a mean of 3.29, although it must be remembered that these responses are subjective and self-reported and therefore may not accurately represent actual practice. They also do not necessarily line up with the agree/disagree scales used for the previous questions. Nevertheless, they do appear to match up with the mean of 3.26 for confidence in ability

to teach pronunciation and support the observation that there appears to be a gap between the importance of pronunciation and teachers' confidence in their ability to actually teach it, as well as the frequency with which they teach it. These respondents are also experienced teachers who already have an interest in pronunciation so one can imagine this gap is likely to be much greater amongst less experienced teachers.

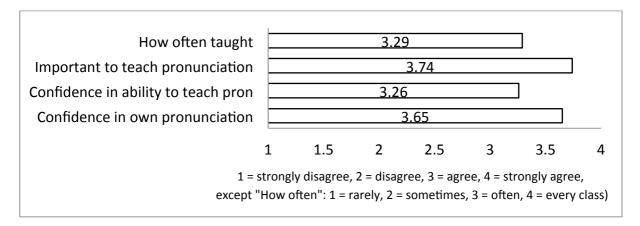


Figure 1: Frequency, importance and confidence

There was also a follow-up question for those who answered that they taught pronunciation only rarely or sometimes. Four respondents said they did not teach pronunciation often because there was not enough time and three said they did not know how. Open-ended responses also revealed concerns about teaching the wrong thing, difficulties in helping individual students with L1 specific problems, valuing other aspects more than pronunciation, and a lack of certainty as to what pronunciation teaching actually means (is it the phonemic alphabet or does it include stress?)

### What is taught

Respondents were given a list of features (vowels, consonants etc.) and asked how often they taught them on a scale of one to five (1=never, 2=occasionally, 3=sometimes, 4=often, 5=almost always). The results, expressed as means, are presented in Figure 2. As can be seen, word stress is most commonly taught, followed by consonants and vowels. Although most research has tended to divide teaching up into segmental versus suprasegmentals, the split here may be between features within and up to the level of the word as these account for the top five choices, and teaching at beyond the level of the word. In this survey, the features beyond word level offered to respondents were sentence stress, connected speech, intonation and rhythm and these were all in the lower half of the table in terms of how frequently they were taught.

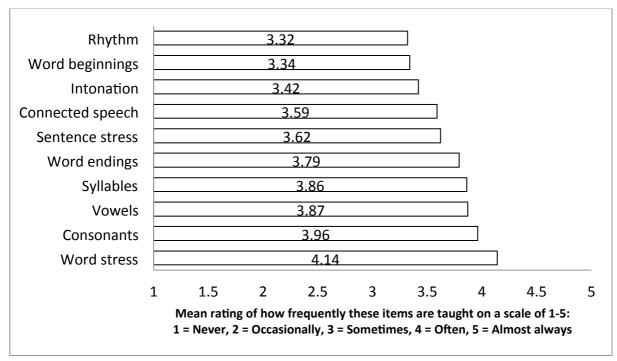


Figure 2: How frequently different features are taught

There was also an opportunity to add other aspects of pronunciation which were taught. Seven participants mentioned features that are important for stress and prosody: Schwa and weak forms, pausing, chunks and tone groups. Six referred to the relationship between sounds and spelling, three worked with the phonemic chart and transcription while a further three referred to aspects of articulation. Two respondents mentioned different varieties of English.

One further open question in this section asked participants to explain their reasons for deciding what to teach. These responses (N = 66) have been grouped by thematic area. The most common reasons tended to revolve around perceived learner need (N=28), considerations of intelligibility and effective communication (N=20), and L1 related difficulties (N=14). In many cases, these choices were made on an *ad hoc* basis (N=10) as difficulties became evident during the course of a lesson. In some cases (N=8) the teachers' awareness, or confidence in their knowledge of, or ability to teach, a particular feature played a role in deciding whether or not to teach it. Two respondents said it depended on the textbook or teaching materials they had while another two said it was a trade-off between time spent teaching the item and the value of the feature.

#### Error correction

When asked how often they corrected errors, 9/78 (12%) said "Almost always", 38 (49%) "Often", 29 (37%) "Sometimes", 2 (3%) "Occasionally" and none said "Never". In terms of timing (they could provide more than one response here (N=64) and there was also room for other responses), participants reported: Only when communication is affected (39 = 61%), immediately (36=56%), after an activity (34=53%), only as part of a planned pronunciation lesson (17=27%). Other comments (N=36) were essentially saying that it depends: They correct at different times depending on the stage or focus of the lesson and the nature of the error. Participants were also asked how they correct errors and were given four options to choose from (See Figure 3). These options focused on the distinction between implicit and explicit correction, all involving a reformulation of the item in question: Recast (65%); saying it is wrong followed by a recast and getting the student to repeat it (51%); and saying it is wrong followed by a recast and providing an explanation (24%).

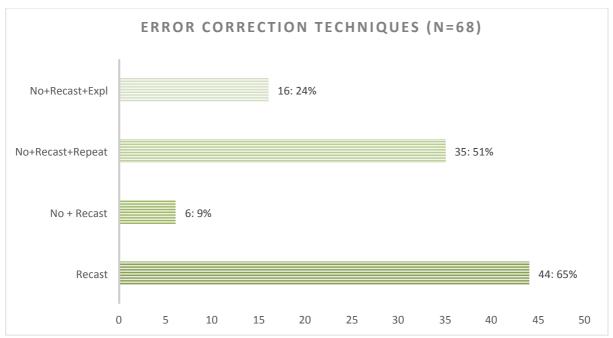


Figure 3: Error correction techniques

As noted in the literature review, error correction is more complicated than this, so participants were given the opportunity to describe other techniques they use. The 46 responses describing additional correction techniques have been grouped into five broad descriptive categories (the first three align quite well with the analysis made by Lyster et al. [2013]):

- Explicit: Explanation, including further practice, ways to make them aware, explanations of articulation, use of IPA, use of personalised post-it notes, in two cases explaining teacher's perception of what student said (N=17).
- Prompt: Try to elicit the correct form first, possibly by repeating what they said with a questioning intonation, get them to re-try, focus on self-correction (N=10).
- Prompt and Reformulation: Recast and repeat, do not say it is wrong, but indicate how to improve it, try to raise awareness of errors, e.g. by mirroring what the student says (N=7).
- Involve the whole class in correction, including peer and self-correction (N=6).
- Provide further practice and modelling in context (N=3).

#### **Discussion**

The participants in this survey are likely to represent experienced teachers who have some interest in pronunciation teaching and as such the results cannot be generalised to the wider teacher population. Nevertheless it would appear reasonable to assume that, with just under half of respondents saying their training had been sufficient to give them the confidence to teach pronunciation, there is a lack of attention being paid to pronunciation teaching in teacher education programmes in New Zealand. The interviews undertaken as part of the same project produced similar results, although it seems that diploma level studies did provide a better grounding (Couper, in press). These findings support Murphy's (2014) conclusion that teacher education programmes are still not providing sufficient training in pronunciation teaching. A number of gaps in teachers' knowledge become clear in the survey: knowledge about phonetics and phonology at segmental and suprasegmental levels; knowledge of how to teach pronunciation; knowledge about learners' needs especially in relation to their L1s; and finally there was the question of how to integrate pronunciation into teaching. Similar findings have also been reported elsewhere (e.g. Burns, 2006; Couper, 2016; Foote et al., 2016, Murphy, 2014).

The survey found that teachers realised the importance of teaching pronunciation but they were not entirely confident in their ability to teach it. It also appears that they may not teach it as often as would be expected to considering how important the respondents felt it was. This lack of confidence and resultant neglect has also been found in several other studies (e.g. Baker, 2011; Couper, 2016; Foote et al., 2011; Fraser, 2000; Macdonald, 2002). In particular, teachers lack the confidence to teach suprasegmentals, especially stress and intonation (Baker, 2011; Burgess & Spencer, 2000; Couper, under review; Foote et al., 2011). While the survey did support these other findings in that four of the five lowest ranked features taught were suprasegmentals, it was notable that word stress, a suprasegmental feature was rated as the most often taught. It was observed that features up to and including the level of the word were taught more often, and features at beyond

the word received less attention. This suggests the possibility, and one that might be worthy of further investigation, that teachers see the word as the key phonological unit and so their focus is on the word and all the underlying phonological aspects that go towards accurate production of the word.

Many of the teachers said they decided what to teach in response to learner needs and considerations of intelligibility and effective communication. This suggests that for some at least there is recognition that intelligibility and comprehensibility are more appropriate goals than native speaker norms. This theme also emerged from interviews in New Zealand (Couper, in press) and has been reported and discussed elsewhere (Couper, 2016; Grant 2014). Knowing how to help learners improve intelligibility and comprehensibility depends on understanding individual needs; therefore, teachers need to establish what these are jointly with the student through a diagnostic process at the beginning of the course rather than on an *ad hoc* basis. Researchers have established that some phonemes are more important than others and that prosodic features are also important (Derwing & Munro, 2014).

The participants generally felt error correction was important and they used a range of techniques. As in other research results (Lyster et al., 2013) recasts were found to be the most common technique, but a wide range of other techniques was also evident. This involved the range of prompts and reformulations identified in the literature (Lyster et al., 2013), although the importance of peer and self-correction, and of providing additional practice was also highlighted. While recasts are quick and easy to use they rely on the learner recognising in the first instance that it is a correction and then understanding exactly what is being corrected. To be able to act on the correction, the learner also needs to understand the phonological concept such that they can hear the difference and know what to do. This suggests that correction will be most effective when the item has already been taught (Saito & Lyster, 2012) and when the teacher and learners have already developed a way in which to communicate about the particular concept (Couper, 2011).

Until ten years ago there had been little research on pronunciation teaching so it is not surprising that many teachers do not feel well equipped to teach it. However, research has now clearly established that explicit pronunciation teaching can be effective, and indeed that it should be taught. Derwing and Munro (2015) provide a very thorough review of this research and its implications for teaching. Grant (2014) analyses a number of commonly held myths around pronunciation teaching in the light of more recent evidence and a recent handbook (Reed & Levis, 2015) provides a good overview of English pronunciation and how it can be taught. There are also useful resources such as Celce-

Murcia, Brinton, Goodwin, and Griner (2010) that provide teachers with guidance on how they should go about their teaching.

In terms of where the teacher should start, the importance of awareness-raising is well established. Learners need to be aware not just that they have a problem but to understand its precise nature. Therefore, teachers and learners need to be able to communicate explicitly and meaningfully about it through what I term socially constructed metalanguage (Couper, 2011). Once there is awareness, learners need practice in order to form phonological concepts and understand where the category boundaries are. Thus through critical listening (Fraser, 2009) they hear what the expert speaker would perceive as belonging or not belonging to the particular category. Learners must also be actively involved in the meaning making process and have the right kind of practice, practice that helps in the formation of phonological concepts. Corrective feedback is also essential and must be provided in such a way that learners understand what is being corrected and the concept involved. Overall then, instruction needs to be defined in terms of what will help in the formation of phonological concepts (Couper, 2011).

#### Conclusion

The results of this survey suggest that the situation in New Zealand with regards to the teaching of pronunciation is similar to that in other contexts. It is clear that teacher education programmes could provide a stronger focus on pronunciation in terms of both phonology and how to teach pronunciation. It is heartening that many teachers recognise the importance of teaching pronunciation even if they do not always have the confidence in their own abilities to teach it as often as they might. Experienced teachers do of course develop competence and confidence in this area if they take the time to reflect on their practice and keep up with professional reading. There is no doubt that the knowledge and experience exists within the New Zealand teaching community to provide for professional development and reflective practice. Finally the results of this survey in conjunction with other data collected from interviews and classroom observations will help to paint a picture not only of the gaps in teachers' knowledge but also of what teachers know and practice. Together this helps to develop teacher cognition as well as inform a research agenda that is more closely tailored to practitioners' needs.

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# Appendix 1: Survey of pronunciation teaching practices and beliefs

Part 1: Background information.
1. Age: $\square < 30 \ \square \ 30-39 \ \square \ 40-49 \ \square \ 50+$
2. What is your first language?
3. What other languages do you speak? After each language, indicate your proficiency Elementary, Intermediate, Advanced, Native speaker-like
4a. What is your highest language teaching qualification?
b. When did you complete it?
5. What is your highest academic qualification?
6. Are you currently working towards a qualification? (Please specify)
7. Professional development in pronunciation: Conferences, workshops, reading?  (Please specify)
8. During your training did you learn enough to be confident teaching pronunciation?
□ No □ Not sure □ Yes What, if anything, do you wish you had learned?
9. Years of English language teaching experience: □ <2 □ 2-4 □ 5-10 □ 10+
10. Current (main) teaching situation: a) □ Primary school □ secondary school
☐ language school/tertiary institute ☐ private ☐ businesses
b. Age of students: □ children □ teen-agers □ adults
c. Level: □ elementary □ intermediate □ advanced
d. Do you have significant experience in other teaching situations? (Please
state)
11. Pronunciation teaching experience? □ None □ A little □ Some □ A lot

# Part 2: Practices and beliefs

1. I am confident i	n my own pronunciation.
☐ Strongly	disagree □ Disagree □ Agree □ Strongly agree
2. I am confident i	n my ability to teach pronunciation.
☐ Strongly	disagree □ Disagree □ Agree □ Strongly agree
3. It is important to	o teach pronunciation
☐ Strongly	disagree □ Disagree □ Agree □ Strongly agree
4. I teach pronunci	iation
☐ Rarely ☐	Sometimes □ Often* □ Every class*
*Go to ques	tion 6
5. I don't teach pro	onunciation very often because I believe:
☐ It doesn't	t work □ I don't know how □ There's no time □ Other
6. Deciding which	aspects of pronunciation to focus on:
a) I teach the	e following features
Vowels:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Consonants:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Word endings:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Word beginnings:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Syllables:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Word stress:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Sentence stress:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Connected speech:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Rhythm:	□ Never □ Occasionally □ Sometimes □ Often □ Almost always
Intonation:	$\square$ Never $\square$ Occasionally $\square$ Sometimes $\square$ Often $\square$ Almost always

Other: □ Never □ Occasionally □ Sometimes □ Often □ Almost always
b) Because (please explain, if there are reasons why you choose some features and not others):
7. Dealing with pronunciation errors
a) How often: I correct pronunciation errors:
□ Never □ Occasionally □ Sometimes □ Often □ Almost always
b) When: I correct pronunciation errors:
☐ Immediately ☐ After an activity ☐ Only when communication is affected
☐ Only as part of a planned pronunciation lesson ☐ Other
c) How: I correct pronunciation errors by:
☐ Repeating the word correctly
☐ Saying it is wrong and repeating the word correctly
☐ Saying it is wrong, modeling the word and getting the student to repeat it
☐ Saying it is wrong, repeating the word correctly with an explanation
□ Other
8. Please add any further thoughts, ideas or questions which you may have about pronunciation teaching:

# THE TECHNICAL VOCABULARY OF CARPENTRY: LOADS, LISTS AND BEARINGS

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#### **Abstract**

This article focuses on lexical challenges for Carpentry trainees in the course of their study and the development of a pedagogically-oriented technical word list from a written corpus. This research is part of a larger project on the Language of the Trades (LATTE) which investigates the language specific to four trades: Carpentry and Plumbing in the building trades, and Automotive Technology and Fabrication in the Engineering trades. Key questions for the LATTE project include: What are the language features of these trades and how do learners learn that language? For this article, the technical vocabulary of Carpentry is under investigation, through interviews with three tutors and questionnaires on learning from ten students in Level 3 and Level 4 Carpentry courses at a polytechnic in New Zealand/Aotearoa, and through developing and analysing a written corpus of this trade. Both first and second or foreign speakers of English were involved Key learning challenges which arose from the interviews and in the study. questionnaires are the heavy reliance on oral language in the classroom and on the building site and the large amount of lexis to be learned for study and for joining the profession. The corpus analysis focused on the estimation of the vocabulary load of the pedagogical texts of Carpentry and identification of technical vocabulary in Carpentry, and led to the development of a pedagogical word list. This list contains 1,424 words, presented in this article in sublists arranged by frequency. A description of the kinds of lexical items in this list follows, along with lists of common abbreviations and proper nouns. Teachers and learners in the trade may find these lists useful for setting goals for vocabulary learning in Carpentry and for checking that key lexical items are known before a course of study. They might also find solace, support and suggestions for pedagogy in the reports on challenges in learning technical vocabulary in this trade.

#### Introduction

The focus of this article is first on the challenges which learners of Carpentry face with vocabulary in the course of their studies. The second focus is on the identification of the technical vocabulary of Carpentry based on a corpus study of pedagogical texts. Technical vocabulary is important to learners and teachers for several key reasons. Firstly, the specialised language of a discipline is likely to be very closely connected to a student's knowledge of that discipline (Woodward-Kron, 2008, p. 246). A good example of this point is trying to talk about Carpentry without mentioning *measurements*, *timber* 

or *moisture*. Furthermore, studies from other professional and academic corpus-based research suggest that the technical vocabulary of a trade is likely to account for a substantial amount of a text. Chung and Nation (2004) used a scale of technicality to identify and categorise the vocabulary of an anatomy text and found that up to 30 percent of the text was technical. They also found that 20 percent of the vocabulary of an applied linguistics text was technical in nature. These figures suggest that the amount of technical vocabulary in a text could be as high as one word in three. Also, just like in other areas of specialisation, such as medicine (Coxhead & Quero, 2015; Lei & Liu, 2016; Hsu, 2013), the vocabulary of Carpentry is key to being a member of a professional group (see Wray, 2002). One of the tutors in Carpentry we interviewed at WelTec, a polytechnic in Wellington, put it this way:

...builders have their own sort of language, and I try and get the guys to talk to me in that sort of language, similar language, you know the size of nails, the size of the timber, the grade of the timber, the treatment of the timber.

For first and second or foreign speakers of English, it is likely that the technical vocabulary of the trade has to be learned alongside the content of the courses. To coin a phrase from Lesli Maxwell in her article on academic English (2013), nobody is a native speaker of Carpentry. For these reasons, it is important to investigate the technical vocabulary of this trade.

## The learning burden of technical vocabulary

One way to investigate the learning burden of vocabulary in a particular area is to analyse the lexis in a specialised or technical text using Nation's British National Corpus word lists (see Nation, 2006). These lists can help determine the number of words a learner needs in order to read the text. Nation (2006) found that 8,000-9,000 word families plus proper nouns are needed for reading novels, newspapers, and tertiary level texts. This number of word families is calculated using percentage figures of coverage of the word lists over texts such as novels, meaning that over 98% of the texts is covered by 8,000-9,000 word families. For more on these figures, see Nation (2013; 2006). The present study aims to find out more about the vocabulary load of Carpentry texts through analysing a pedagogical corpus of texts developed for this study.

Another way to investigate the learning burden of vocabulary is to go to primary sources, in this case, interviewing and surveying learners and teachers in the particular field to find out more about the learning environment. In the Level 2 Carpentry courses at WelTec, learners and teachers have both theory and practical classes. In the practical classes, everyone is involved in building a house. These kinds of learning activities are likely to have a major effect on how learners are being exposed to and learning the vocabulary of their trade. A study by Holmes and Woodhams (2013) focused on spoken

interaction as a way to acculturate building apprentices. In a study on the vocabulary of Architecture and Building Science with learners of English as a foreign language, Peters and Fernández (2013) used interviews with their learners to investigate the vocabulary that the learners needed for their studies and what resources they used to support their learning. The students in this study reported that they tended to look up technical words (such as *gutter*, *façade*, and *rubble*) in dictionaries, and that they also had problems learning words that would be considered general vocabulary (such as *framework*, *sustainability*, and *consumption*). A key question in this article is the challenges of technical vocabulary in Carpentry from the perspectives of learners and tutors, drawing on primary sources.

## Identifying technical vocabulary

One of the key questions around identifying the technical vocabulary of a trade is how to decide whether a word has a technical meaning in a particular trade or is an everyday word. A strength of the Chung and Nation (2004) study mentioned above is that it takes all kinds of vocabulary into account: the high frequency everyday words and the more technical words as well. The researchers used a four-level scale to categorise the technical vocabulary of two texts, anatomy and applied linguistics. The Chung and Nation (2004) scale is in Figure 1 below. Note the scale starts with the least technical vocabulary and ends with the most technical.

- Step 1 Words such as function words that have a meaning that has no particular relationship with the field of anatomy. Examples are: *the, is, between, it, by, 12, adjacent, amounts, common, commonly, directly, constantly, early,* and *especially*.
- Step 2 Words that have a meaning that is minimally related to the field of anatomy in that they describe the positions, movements, or features of the body. Examples are: *superior*, *part*, *forms*, *pairs*, *structures*, *surrounds*, *supports*, *associated*, *lodges*, and *protects*.
- Step 3 Words that have a meaning that is closely related to the field of anatomy but are also used in general language, or may occur with the same meaning in other fields and not be technical terms in those fields. Examples are: *chest, trunk, neck, abdomen, ribs, breast, cage, cavity, shoulder, girdle, skin, muscles, wall, heart, lungs, organs, liver, bony, abdominal,* and *breathing*.
- Step 4 Words that have a meaning specific to the field of anatomy and are not likely to be known in general language. They refer to structures and functions of the body. These words have clear restrictions of usage depending on the subject field. Examples are: *thorax, sternum, costal, vertebrae, pectoral, fascia, trachea, mammary, periosteum, hematopoietic, pectoralis, viscera, intervertebral, demifacets,* and *pedicle*.

Figure 1:

Steps in Chung and Nation's (2004, 105) scale of technical vocabulary

In Carpentry, for example, in a corpus we have found high frequency words such as *fixing, figure, line* and *edge*, which all have technical meanings in the trade. We enlisted the tutors in the Carpentry programme at WelTec to help us identify lexical items from our corpus analysis (for more on the corpus, see the methodology section below) and decide whether they are technical or not, using tutor judgement tasks. We also referred to the corpus texts themselves for context as well as online tools such as dictionaries. Table 1 has some examples of lexical items in Carpentry, based on our corpus analysis. It would be interesting to know whether readers of this article know these words in English or not. One feature of technical vocabulary is its narrow range of use (see Nation, 2013; Chung & Nation, 2004). People outside the field may be familiar with the general meaning of these words but perhaps not their technical meaning or subtleties. That is, they might be aware of the meaning of a word in the first three steps on the Chung and Nation (2004) scale in Figure 1, but not the final one.

Table 1: Some examples of items from the written Carpentry corpus

floor	roof	foundation	stud	dwangs
H1	H1.2	bullnose	Gib	jack
gang nail	truss	knurl	mullion	dunnage
studs	Hardies	flange	2x4	flashing

Note that the table includes proper nouns such as Gib and abbreviations. We will say more about abbreviations below.

## Developing a pedagogical word list for Carpentry

The main purpose of the corpus study is to identify the technical vocabulary in the written Carpentry corpus. Written texts are important in the Carpentry setting because tutors assign reading to support learning and assessments commonly involve reading and writing tasks such as the builders' diaries and completing unit standard based assessments, all of which require the use of technical words. The list is called a pedagogical word list because it is based on pedagogical materials or professional writing which are used as reading for students in Carpentry classes. Figure 2 shows a sample of a unit standard for Carpentry that learners are assessed against. Lexical items from the pedagogical word list of Carpentry are in italics.

### Elements and performance criteria

#### Element 1

Carry out safe working practices on construction sites.

#### Performance criteria

- 1.1 The *location* and purpose of employer's *safety procedures* are explained, and the consequences of not following them are outlined.
- 1.2 Hazards are identified and controlled in accordance with employer's safety procedures.
- 1.3 *Construction* machinery is guarded in *accordance* with employer's *safety procedures* and *manufacturer's* instructions.
- 1.4 Personal protective clothing and equipment\* is used in accordance with employer's safety procedures.

Range seven of – *high-visibility*\*\* clothing, protective clothing, *safety* footwear, hearing *protection*, eye or face *protection*, hard hat, *dust mask* or *respirator*, *gloves*, *UV protection*, *appropriate* fire extinguisher.

1.5 Walkways, thoroughfares, and platforms are kept clean and clear of obstructions in accordance with employer's safety procedures.

### Figure 2:

A section from Unit Standard 13036, Carry out safe working practices on construction sites

The reader may wonder why *equipment* is in the list and *machinery* is not. *Machinery* happens to be listed under headword *machine* in Nation's BNC/COCA lists (and *machine* is in our "types" list, as it is much more frequent than *machinery*)

There are several important reasons for developing a vocabulary list for Carpentry. Firstly, technical word lists may help learners who are new to the trade to find out what lexical items they will meet in the course of their studies. We also thought it would be useful to see what kinds of words are commonly used in Carpentry. The list might be useful for setting goals for Carpentry courses, making sure that key words and their meanings are explained well to help learners with learning them, and checking at the end of the year of study what words have been learned and how. We developed the pedagogical corpus to operationalise this study into the lexis of Carpentry.

## Research questions

- 1. What are the challenges of learning the technical vocabulary of Carpentry?
- 2. What is the vocabulary load of Carpentry texts in the corpus?
- 3. What lexical items occur frequently in a written corpus of Carpentry?

<sup>\*</sup>Note: *PPE* = Personal Protective Equipment is in the list of abbreviations.

<sup>\*\*</sup>Note: *HIVIS/HIVIZ* = high-visibility is in the list of abbreviations.

## Methodology and data analysis

There is spoken and written data in this project; including data from students, tutors, and the written corpus. There were interviews with four Carpentry students and questionnaire responses from ten Carpentry students on vocabulary learning in their trade (see Appendix 1 for the questionnaire). This data was analysed quantitatively and qualitatively. Six interviews were also held with Carpentry tutors. The interviews took place on campus with one of the researchers. Ethics approval was sought and given for this data. The student interviews and questionnaires all preceded the corpus development and interviews with tutors were concurrent with the corpus development and analysis. The Carpentry corpus was compiled for the purpose of this study and contained materials such as workbooks, unit standards, and instruction manuals and were gathered from tutors. The texts came from the two main Carpentry programmes which are at Levels 3 and 4 of the New Zealand Qualifications Framework (see http://www.nzqa.govt.nz/) and the organisation of the corpus is in Table 2. The corpus contains just over 9,500 types.

Table 2: *Overview of the Carpentry corpus* 

Level	Examples of topics	Running words	
Level 3 Carpentry modules (Tri 1 + 2)	Exterior Student Version2	231020	
	GIB-Site-Guide-2014		
	Interior Student Version1		
	Introduction To The Building Industry		
	Site Preparation		
Level 4 Carpentry	Commercial Buildings	69574	
resources	Alternative Building Methods (e.g. strawbales)		
Total running words		300,594	

The vocabulary in the Carpentry corpus was analysed using Heatley, Nation and Coxhead's (2002) Range Programme, through adapting Nation's (2006) British National Corpus/COCA (BNC/COCA) word lists up to 25,000 word families. The BNC/COCA lists also include word lists of proper nouns, abbreviations, marginal words (such as *um* and *ah*), and compounds. This analysis allows for estimations of vocabulary load (see Nation, 2006) and for the selection of lexical items for the Carpentry word list.

## Selecting words for the pedagogical word list

The items were selected for the list using the following steps. First of all, Nation's BNC/COCA 25,000 lists were run over the Carpentry corpus to identify words which occurred in the corpus but not in any of Nation's lists. Then the items not found in the lists were categorised in several ways. If they belonged to a word family in the existing BNC/COCA lists, they were added to their families. If they belonged to the abbreviations, marginal words, proper nouns, or compound nouns lists in Nation's supplementary BNC/COCA lists, the words were added to those lists. Any words which occurred only in Carpentry were made into a Carpentry trades list, based on the same format as the BNC/COCA lists. Some of the items in this BNC/COCA-based list occur over 30 times in the Carpentry corpus, for example *hardfill*, *radiata* and *skillion*, while the majority occur only a couple of times, e.g. *kahikatea*, *cadastral* and *scoria*. By categorising all the words in the corpus, we were able to then apply frequency principles to the results of the Range Programme (Heatley et al., 2002) for selecting the items for the word list. Here are the frequency principles:

- Items which occurred more than ten (10) times in the Carpentry corpus from the BNC/COCA 25,000 and Nation's supplementary lists were selected.
- Items with a frequency of four (4) or more were selected from the BNC/COCA-based Carpentry list. The lower threshold for frequency for these words reflected the small size of the corpus.

Note that these selection principles were used for each item in the lists, and that the trades-based lists were one step in the categorisation of the vocabulary in the Carpentry corpus.

An initial ranking by two researchers focused on removing function words and everyday words which did not have a technical meaning in Carpentry. This process was informed by double-blind ranking, checking dictionaries, referring to the corpus, and using online Carpentry resources. We then asked Tutors at WelTec to rate items compiled from the Level 3, Trimester 1 resources according to whether they thought the words were technical or not. The items were in three columns in an Excel spreadsheet. The first column contained the target items, the second column was for the decision on technicality of the target items and the third column was for the teaching decision. Figure 3 shows the instructions given to the tutors for the decision task.

```
Please go through the following list of words and decide if each of the words is:
```

2 = a Carpentry word: architrave, batten, beam, etc.

or a word that is closely related to: apron, envelope, foam, etc.

1 = a word that is only minimally related to Carpentry: angle, defence,

exposure, etc.

0 = a word that is very general and not related to Carpentry: basic, category,

improve, etc.

Then decide if you think you need to teach these words:

Yes = I need to teach this word

No = I never need to teach this word

Figure 3: Guidelines for the decision task for the Carpentry tutors

The focus of the technical decision task was on the Carpentry vocabulary from Levels 3 and 4 of the Chung and Nation scale (2004) (see Figure 1). We used these texts because at that stage in the process, we did not have access to the Level 4 texts. The words which were selected by the tutors as being not technical were removed from the pedagogical word list. The Level 4 texts were added to the corpus for this study.

## Findings and Discussion

# Research question 1: What are the challenges of learning the technical vocabulary of Carpentry?

An important part of technical vocabulary in Carpentry is that the mode of learning is predominantly listening based. Here is Terry, a Carpentry student, talking about the heavy cognitive load of listening in the course of his studies,

Because [the tutor], when we're doing um the frames, I think, it was of something he will just tell you, like you have to listen very carefully because he will just be like do this, do this and then after you've done that, do this, do this, do this. So you gotta just keep that all in your head and [it is] actually really hard cos you're just focusing on one thing and then after that you've got to do another thing but you can't lose sight of what the other thing was...

Another student's response to a questionnaire in our study reinforces Terry's point: "If you don't pay attention and listen, you won't pick it [the vocabulary] up."

Memory was identified as a challenge for learning technical vocabulary. Four of the ten students mentioned problems with remembering (or forgetting) vocabulary. As one student wrote in the questionnaire, "Semetimes i forget becuase when you Start to learn more you forget but once you get into it you just no what to do [sic]". Perhaps related to this point is remembering some, at times, quite strange words in Carpentry. One student remarked that for him, the challenge was "Probably the names – 'safiet' [sic - soffit]". Memory and spelling were a concern for two students. One summarised the problem by writing, "Remembering the words. Spelling the words. They sound really weird making it hard to remember and spell out." One of the students wrote in the questionnaire about how confusing it can be to ensure that the right word is being connected to the right concept or tool in the trade. He wrote, "Learning what word means which component because there are so many to learn it can get confusing and mix up".

Two students commented on the sheer amount of vocabulary they needed to learn in their studies, while another had identified a problem with not being immediately able to put the new lexical learning to use. He wrote, "[One problem is] Not being able to immediately apply the new words to the action or item. Because it is my first year learning about Carpentry."

When it came to suggesting ways in which these students tried to learn the vocabulary of their trade, three students responded that one of their strategies was using this vocabulary in their speaking and writing to help them learn, while four others responded that they asked for the meaning of the new words from tutors. Tutors were identified as main suppliers of support and information about vocabulary. They did this through several means: four students commented that their tutors told them the meaning of words or explained them, two reported that their tutors used the vocabulary, showed what it meant, and provided the function of building items named by the words. One student commented, 'He [the tutor] always questions us on the material or products on site. This helps us remember the words.' This kind of interaction is also mentioned in this student's comment: 'Normally ask a question in response to further my understanding of the word or phrase'.

Here is another example from an interview with a student to illustrate this point. He said that the tutor provided support for vocabulary learning embedded in the content of the class:

Probably just like the tutor like draws out on the whiteboard and then like write a plan...you know...what to do next. On the way, there will be new words but they, the tutor, use pictures to explain what is it, where does it go, so you know what, where does it go in between. If it is a stud, is a normal stud. A dwang is horizontal

and the studs are verticals so within the frame... yea...within the frame there are studs and dwangs supporting...yea...supporting the studs...So you know its function....yea....you know the dwangs function...yea...

The final question about vocabulary in the questionnaire and also asked in the interviews with students was what advice they would give a friend who was thinking about studying Carpentry next year. The focus of this question was how that person might deal with the vocabulary of the trade. Note the interesting mix of strategies in the list below, along with comments meant to encourage the prospective student. We believe these comments also shed light on the heavy load of technical vocabulary in the trades, on how the combination of visual elements and vocabulary are seen to help learning, and the need to pay attention and listen as a key strategy for learning in the trades.

- You will get use [sic] to it and it will become easier the longer you do it
- You will pick it up as you go along it just takes time
- Advise them about practical stuff and give them "pictures" about specific tasks.
- Always keep track of new words, because they will always come up again in future Carpentry jobs. Knowing more words about building helps in a lot of ways.
- Pay attention and concentrate it's not hard to learn if you do these two things
- Got to stady [sic] hard and Listen
- Study the branz [Building Research Association of New Zealand] book. Have a basic understanding of the English language.
- Pay attention to the words, Remember them write down in dairy [sic] to refer to them later
- Stick at it bro

### Figure 4:

Specialised vocabulary learning suggestions from Carpentry students

Note the specific reference to the BRANZ book by one of the students in the list of strategies. This reference was the only example of a particular book mentioned in the interviews.

## Research question 2: What is the vocabulary load of Carpentry texts in the corpus?

To reach 98% coverage of the corpus requires the 8,000 word families plus both Nation's and the Trades supplementary word lists, which includes proper nouns, abbreviations, the Carpentry and trades lists, and compounds. That said, these texts include visual support, such as diagrams, as well as explanations of technical terms, which suggests that a lower

coverage figure might be a more useful guideline. Laufer and Ravenhorst-Kalovski (2010) suggest 95% as a 'minimum lexical threshhold'. To reach 95% requires 5,000 word families plus both Nation's and the Trades supplementary word lists. Both these figures suggest that Carpentry learners need a fairly large vocabulary to understand their written texts.

Table 3 provides a breakdown of the coverage figures for the corpus up to 98%, using the framework of Schmitt and Schmitt's (2012) categorisation of frequency levels for vocabulary, based on Nation's (2006) BNC/COCA and supplementary lists, and the supplementary trades lists.

Table 3: Results for the vocabulary load of the Carpentry corpus

Vocabulary level	Percentage of coverage (tokens)	Examples of words
High frequency words – 1,000-	84.69	1000 word list: building; wall; floor
3,000 BNC/COCA		
Mid-Frequency – 4,000-8,000	8.23	4000 word list: timber; insulation; moisture
Supplementary lists	5.26	Proper nouns: GIB
		Compounds: plasterboard; formwork
		Abbreviations: ITP; NZS
		Carpentry list: hardfill; radiata
Total	98.18	

The division of vocabulary levels by frequency from Schmitt and Schmitt (2012) categorises the first 3000 word families of the BNC as high frequency, the 4000-8000 as mid-frequency, and from 9000 onwards as low frequency.

The highest coverage in the supplementary lists is proper nouns at 1.41%, and then abbreviations at 1.33%, and compounds at 1.10%. The BNC/COCA-based Carpentry list covered .50% of the corpus. These figures suggest that learners need a fairly large vocabulary to read these texts, that this vocabulary contains a wide range of vocabulary from high frequency words through to proper and compound nouns. These figures fit

with estimates from Nation's (2006) studies of the vocabulary load of other kinds of texts, as mentioned before, at 8,000-9,000 plus proper nouns for 98% coverage. The coverage figure of the Carpentry BNC/COCA list is fairly low at 0.57, but this list is a useful step towards developing a pedagogically oriented word list based on all the BNC/COCA trades adapted word lists described in the methodology section above.

# Research question 3: What lexical items occur frequently in a written corpus of Carpentry?

Word lists tend to be presented in word families, for example, Coxhead's Academic Word List (2000) and Nation's BNC lists (2006) or as lemmas (stem plus words with the same part of speech, e.g. *talk*, *talks*, *talked*, *talking*), as in Brezina and Gablasova's (2015) New General Service List and Gardner and Davies' (2014) New Academic Word List. However, in this study, the pedagogical word list of Carpentry is presented as a list of types. This decision was made because not every word in a word family is a specialised word in Carpentry. For example, *flashing* or *flashings* are in the Carpentry list, but *flash* is not. The word list has 1,424 individual types and the most frequent type in each family is presented in Appendices 2, 3 and 4. Note that some of the items in the list have double entries: e.g. priming/prime(d), which is the case when two types have the same frequency. When the abbreviated form of a headword is more frequent, it was moved to the abbreviations list.

We have divided the list into sublists by frequency. That means that Sublist One contains the 100 most frequent word types in the list. *Requirement(s)* is the most frequent word in the first sublist, and *exterior* is the least frequent item in Sublist One. Sublist Two contains words that are less frequent than Sublist One, and so on. Appendix 2 contains the most frequent Sublists One to Five; Appendix 3 contains Sublists Six to Ten; and Appendix 4 contains Sublists Eleven to Fifteen. There are 100 words in all the lists except for Sublist Fifteen, which has 24 The words are not listed alphabetically because it is the frequency of the words which might be the most important factor. Table 4 shows how the list would look alphabetically, and how it would look if listed by frequency.

Table 4: The ten most frequent words in the pedagogical Carpentry word list arranged by alphabet (left column) and by frequency (right column)

Ten most frequent words by alphabet	Ten most frequent words by frequency			
activity	requirement(s)			
adhesive	figure			
applied	building			
area	wall			
batten(s)	timber			
beam	roof			
bear	concrete			
block	installation			
board	construction			
bracing	fixing			

The pedagogical word list contains a range of compound nouns, for example plasterboard, hardfill, underpurlin and downpipe. Such lexical items often occur in the corpus as one word or joined by a hyphen (for example, cross-section), so where necessary, we have included hyphens for clarity. Everyday words that have a technical meaning in Carpentry and were rated as technical words by the tutors were kept in the list, for example drip and flow.

The corpus analysis showed that there are a large number of abbreviations in Carpentry, including *OSH* (Occupational Safety and Health) and uPVC (Un-plasticised Polyvinyl Chloride). We separated the abbreviations from the pedagogical word list for easy reference. This list of 104 abbreviations and their meanings in Carpentry are in Appendix 5. We also found 28 proper nouns which are commonly used in Carpentry, such as Ezybrace, Branz, and Toughline. This list is in Appendix 6. Several more observations about the words in the list include common prefixes such as over (for example, overhead, overlap, overload), under (underpurlin, underside, underlie), and pre (prefabricated, precaution); we also found evidence of vocabulary from Aotearoa/New Zealand in the list, such as Māori names of wood, such as tawa, kauri, and matai.

In the student questionnaire, we asked 'What kinds of words do you need to know to study Carpentry?' Responses from eight students are in Figure 5. Note that except for *no* 

and *marks* (as in *no hammer marks*), every lexical item in Figure 5 is in the pedagogical list of Carpentry.

- E.I.M (Eliminate, Isolate, Minimise). Dwangs. No hammer marks. Brightsted nails. Galvanised nails. Truss. Frames. Purlins
- Flashings, Hot dipped galvanised (HDG), Router, Hardies, Claddings, Rusticated/Bevel Back/Rebated Bevel Back weather Boards, Cavity/Ceiling Battens.
- 1) Dwang/nog 2) square it off 3) bevel 4) level 5) hard up 6) no hammer marks 7) Eliminate, Isolate, minimise
- Ribbion [sic ribbon] board, Dewang [sic dwang], No Hamer marks, faicer [sic fascia], partition
- Dwangs Ribbenboard [sic ribbon] No Hammer marks faciers [sic fascias], patition [sic partition]
- 1) Specifications/site plan 2) Studs 3) cladding 4) Cavity construction 5) Galvanized
- 1) Eliminate, Isolate, minimise. 2) Man up 3) No hammer marks 4) Tack in nails. 5) Dwangs. 6) Skilly 7) 2x4
- Eliminate, Isolate, minimise. Tack in Nails. Dwangs. No hammer marks. Skilling. Galvanised. Bright Steel. Purlins. Frame. Trusses. 2x4. Facing Boards

# Figure 5: Student questionnaire responses about vocabulary of Carpentry

This word list is difficult to compare with other word lists, because it is not based on word families or lemmas. It is also unusual in the literature because it comes from a categorisation of all the lexical items in a corpus, based on the BNC/COCA lists. To the best of our knowledge, this research technique has not been used in other studies.

#### Limitations

This article reports on the written corpus analysis, but clearly there is a need for expediting the analysis of a spoken corpus, since the learners report a heavy reliance on speaking and listening in their learning environment. It could well be that the technical vocabulary of spoken Carpentry is very different from the written data presented here. Another limitation is that the written corpus is fairly small, at 300,000 running words, because we wanted to limit the analysis to the actual texts used by tutors and students in the courses. Finally, it is important to verify these findings, perhaps using a second corpus of Carpentry.

# Implications for pedagogy

In this section, we draw on Nation's (2013) framework of planning, strategy training, testing, and teaching vocabulary as the four main jobs of a vocabulary teacher. Nation argues that planning is the most important role of a vocabulary teacher. To help plan for the technical vocabulary of a Carpentry course, teachers and learners could use the

pedagogical word list and the abbreviations and proper noun lists at the start of the course to identify which words may be known or not known. Simply developing a tick list is one way to keep track of the words that need to be included in a course. Having the frequency-based word sublists may help with those decisions, as it is well known that high frequency words are the most important words for anyone to learn and should be learned first (see Nation, 2013).

Experienced tutors will know which lexical items tend not to be known well or to be known by their general meaning based on students from previous years and this knowledge, along with the word lists, may help learners make goals for their self-study. Tutors could also check through the lists and identify words which are related to a particular topic, such as Health and Safety, so they can make plans for supporting their learners with the vocabulary of those topics. Because of the large amount of listening in the trades, combined with some fairly tricky and infrequent words, such as *soffit*, learners might know a word when it is spoken but not when it is written. It is important to check that students recognise these words in writing. Lexical knowledge develops over time and needs plenty of repetition, opportunities for using the words, feedback, and support.

It is clear that the learners in this study have some very good strategies for learning technical vocabulary. Some learners might benefit from sharing ideas on learning strategies at the start of a trades-based course, including tried and tested strategies such as word cards (see Nation, 2013). It might also be useful for learners to keep a notebook of commonly used terms for class.

### **Future research**

We have some more research to do on this vocabulary in Carpentry. We want to do more analysis of common collocations and multi-word units, for example, hip rafter, jack stud, bottom plate, line of defence, wall cladding, building wrap, acceptable solution, pink batts, bevel-back weatherboards. We also plan to find out more about Carpentry vocabulary which is used in speaking, to see if it is similar to or different from the vocabulary which is used in writing. This research is particularly pressing, given the focus on listening for learning in Carpentry. We are also keen to find out more about the vocabulary used in writing by the students in these courses, so we might compare it with the professional writing in the corpus and with the spoken language as well. Finally, it would be useful to investigate whether there is a common vocabulary of the construction trades, Carpentry and Plumbing or whether these trades are considerably different in their lexis.

#### Conclusion

This article has focused on the challenges for learners of the technical vocabulary of a trade: Carpentry. Students commented in questionnaires and in interviews that there are a range of challenges with this vocabulary, including the need to listen to learn this vocabulary, memory and spelling difficulties, as well as the sheer volume of words to learn in the course of studies. The students suggested strategies and techniques for learning the vocabulary and note the key role of the tutor in explaining meanings through visual images and classroom and building site talk. The vocabulary load of the Carpentry corpus is similar to Nation's (2006) estimates of 8,000 plus proper nouns, but the Carpentry vocabulary load also includes abbreviations and compound nouns, and our own BNC-COCA based Carpentry list. Several word lists have been presented in this article, based on research on the reading materials from the Carpentry courses where the tutors in the study work and the students study. These lists include a pedagogical word list of Carpentry, developed through corpus tools and in consultation with tutors, a list of common abbreviations, and a list of proper nouns. These tools may be useful for teachers and learners planning to meet the challenges of the technical nature of the vocabulary of Carpentry.

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# Appendix 1: Questionnaire to students: Language in the Trades

- 1. What qualification are you studying?
- 2. What courses are you currently taking?
- 3. Rank each skill in terms of their importance for your study. 1=least important; 10=most important

	Most important	Fairly	Not very important	Least
		important		important
Reading				
Writing				
Listening				
Speaking				
Vocabulary				

1. What reading do students need to do in courses that you are taking?

	Daily	Weekly	Monthly	Never
Course textbook				
Chapters from the textbook				
Course workbook				
Lecture slides/power points				
Worksheets/ handouts				
Websites				
Instruction manuals				
Site plans				
Building codes				

Official documents – e.g. industry codes, manufacturer's specifications		
Other (please specify)		

Are you assessed on any of these? If yes, which ones are you assessed on? How are you assessed on them?

■ Yes ■ No

# 2. What writing do students need to do in courses that you are taking?

	Daily	Weekly	Monthly	Never
Report on what you do in the workshop				
Report on work done on site				
Summaries				
Short answers to questions in workbooks				
Reports written in teams/groups \				
Notes on work complete e.g. builder's diaries/ Record of work				
Short answers to questions in assessments				
Other (please specify)				

Are you assessed on any of these? If yes, which ones are you assessed on? How are you assessed on them?

■ Yes

■ No

# 3. What speaking do students need to do in courses that you are taking?

	Daily	Weekly	Monthly	Never
Working with a group on writing tasks				
Pair work on writing tasks				
Class discussions				
Presentation				
Working with a group in workshops				
Pair work in workshops				
Working with a group on site				
Pair work on site				
Talking to site manager				
Talking to visiting officials e.g.				
BCITO, building inspectors				
Other (please specify)				

Are you assessed on any of these?
If yes, which ones are you assessed on?
How are you assessed on them?

■ Yes ■ No

# 4. What listening do students need to do in courses that you are taking?

	Daily	Weekly	Monthly	Never
Listening to tutor in classes				
Listening to tutor in workshops				
Listening to tutor on-site				

Working with other students on		
writing tasks		
Working with other students in classes		
Working with other students in		
workshops		
Working with other students on site		
Listening to site manager		
Listening to visiting officials e.g.		
BCITO, building inspectors		
Other (please specify)		

Are you assessed on any of these? ■ Yes ■ No If yes, which ones are you assessed on? How are you assessed on them?

- 5. What other language tasks do students have to do in courses you are taking?
- 6. What kind of words do you need to know to learn Carpentry?
- 7. What's the most difficult thing for you about learning new vocabulary in your trade and why?
- 8. What do you do when you hear a word or phrase that is new?
- 9. How does your tutor support you with learning new words or terms related to your trade?
- 10.If you were advising a friend about taking this trade course next year, what advice would you give him or her about how to learn the vocabulary that they need?
- 11. What reading, writing, speaking and listening do you think you will have to do in your job?

Appendix 2: Sublists One to Five of the pedagogical word list of Carpentry (types)

Carpentry Sublist One	Carpentry Sublist Two	Carpentry Sublist Three	Carpentry Sublist Four	Carpentry Sublist Five
requirement(s)	window	adjustable	diameter	hardfill
figure	unit	excavation	certificate	join(s)
building	interior	drill	dwelling	slip
wall	moisture	bar	soffit	crane
timber	form	glue	curve(d)	cantilever(ed)
roof	profile	quantity	consult	tube
concrete	treatment	metre(s)	bracket	significant
installation	angle	square	jamb	assemble(d)
construction	common	column	dust	matrix
fixing	trim	plywood	clip	dismantling
calculation	glossary	wood	slope	laminate(d)
activity	run	inspection	portable	barrier
frame	equipment	properties	sawn	prop(s)
floor	service(s)	drainage	glass	taper(ed)
site	sand	paper	cracking	knife
joint(s)	base	directly	solution	decorative
development	stair	effective	stainless	procedure(s)
material	correct	electrical	label	classification
carpentry	face	erection	plumb	contour
work	process	deck	view	pour(ed)
consortium	vertical	per	coupler	absorption
point(s)	screw	fibre	post	dwang(s)
surface	panel	limit(ed)	flexible	density
cover(ed)	grade	repair(s)	tight	relatively
sheet	air	paving	zone	manual
bracing	measure	distance	sliding	analysis
safety	ground	perimeter	veneer	ladder
length	proprietary	capacity	rail	stability
applied	tile(s)	retaining	compact(ed)	pin
finish	reduce	ratio	lap	exceeding
section	fasteners	overall	environmental	bench
steel	available	prior	smooth	thread(ed)
cut	connection(s)	substrate	parallel	hammer
method	pole	accurately	suspend	raking
area	subcontractor(s)	alteration(s)	platform	plank(s)
level	act	shower	fence	sash
specifications	code	mechanical	channel	grout
complete	masonry	heavy	mortar	weatherboards

structural	guide	gap	diagonal	oil
line	span	storey	scale	flow
load	clear	double	residential	vibrator/vibration
cladding	joinery	contact	disadvantage(s)	strutting
ceiling	slab	appropriate	gable	diaphragm
set	light	hinge	corrosion	handrail
support	maintenance	plaster	excess/excessive	opposite
edge	access	critical	assembly	pattern
door	internal	hardware	shutter(s)	potential
joist(s)	cast	force(s)	lead	gauge(d)
space	external	resource	sufficient	rectangular
formwork	comply	website	eave	seasoning
plate	mix	box	securely	planer
nail(s)	alternative	aluminium	shooting	batching
plan	dimension(s)	strength	bit	adhesion
information	durability	plant	circle	dress(ed)
check	machine	adjacent	chord	float
centre	head	solid	shingle(s)	principle(s)
table	hole(s)	waste	duty	texture
stud	fill	factor(s)	tension	clay
location	power	boundary	damp	accordance
protection	blade	footing	core	polyurethane
compound	cement	galvanize(d)	preservative	screed
design	tape	strip	package	waterproof
reinforcing	compliance	engineer	gun	stringer
tool(s)	storage	triangle	brick	case
coat	means	valley	mesh	icon
board	expose(d)	impact	sill	conduction
size	content	bending	guard	relevant
manufacturer	rise	plane	log	notifiable
standard	penetrations(s)	confident	link	bridge
foundation	heat	membrane	trowel	rot
beam	ramp	stress	extend	symbol(s)
bear	position	curing	licence(d)	powder
hazard	demolition	specified	score	diagram
truss	pitch	weatherboard(s)	rigid	grinder
block	tie	regulation(s)	chemical	alignment
plasterboard	cavity	ventilation	approximately	aesthetic
house	risk	butt	offset	tolerance(s)
insulation	volume	sheathing	anchor	notch(es)
range	lifting	value	earthquake	terminology
				epoxy

sealant	straight	datum	labour	architrave(s)
batten(s)	underlay	shrink	sharp	tip
lining	description	wear	transmission	series
product	mark	pressure	sequence	intersection
*		•	flush	radiata
member(s)	hip	strap		
contractor	supply	polystyrene	tread	weathertightness
metal	ridge	string	purlin(s)	folding
prevent	component(s)	room	layout	reproduce(d)
resistance	rod	pipe	feature(s)	survey
rafter	bolt	attach(ed)	technique(s)	clause
scaffolding	flat	jack	legislate	embed(ded)
adhesive	fall	adequate	literature	moulding(s)
pile(s)	thermal	layer	minimise	resin
formula	laid	aggregate	grid	corrugate(d)
maximum	junction	groove	plumbing	weatherboard
horizontal	peg(s)	wire	glazing	registered
height	close	temperature	falsework	agent
flashing	lintel	elevation	earth	punch
element	bond	compression	isolate	clamp
consent	delivery	direction	client	commencing
exterior	stiffness	stack(ed)	mitre	

Appendix 3: Sublists Six to Ten of the pedagogical word list of Carpentry

Carpentry Sublist Six	Carpentry Sublist Seven	Carpentry Sublist Eight	Carpentry Sublist Nine	Carpentry Sublist Ten
flange	failure	contamination	impervious	liability
cleat	complex	sleeve	daub(s)	rear
infill	defect(s)	lever	balustrade	submit(ted)
live	cone	ram(med)	melamine	interactive
drop	asphalt	bead	stairway	shaft
medium	hypotenuse	weld(ed)	upstand	collar
function(s)	shelving	diffusion	return	cordless
eliminate	expansion	fabricate(d)/fabrication	filter	mid
chart	reflective	vinyl	mixture	boxed
foil	principal	fillet(s)	visible	chalk
lateral	thoroughly	aerate(d)	sustainable	prone
slate	trench	pail	mild	equilibrium
deform(ed)	disconnect(ed)	dormer	cubic	liner
in-situ	cosine	bevel-back(ed)	subjected	staple
row	permanent	hook	carriage	millimetre(s)
current	deposit(ed)	brand	gravel	abbreviation(s)
staff	reveal	priming/prime(d)	consolidate	pictorial
theorem	soaker	ripping	scenario	asbestos
nog(s)	void(s)	scope	poker	broom
bathroom	friction	visual	vent(ed)	cedar
onsite	prism	impose(d)	differential	crib
wrap	belt	architect	verge	spindle
remedy	blinding	outlet(s)	hose	cypress
cabinetry	flight	conversion	sewer	stile
grain	permit(ted)	conform	retractable	polypropylene
compatible	gravity	adhere	overhang	pinus
arrow	cell	glove(s)	router	buildup
rib	sample	scrape	viscosity	screwdriver
intermediate	grip	saturation	barrow	underground
composite	uniform	conjunction	cornice	weatherproof
deflection	verification	notification	dowel(s)	single-skin
Pythagoras	versatile	formaldehyde	polythene	patch
rough	litre(s)	kerb	dado	quote(s)
approve(d)	shear	trapezoidal	bob	defence
primary	fascia	rusticate(d)	resorcinol	circuit
technical	upper	workplace	cross-sectional	electronic

proof	shelter(ed)	softwood(s)	backfilling	extract(ed)
silicone	liquid	hardwood(s)	heartwood	accelerate/
solvent	disabilities	snap	putlog	accelerator
bevel	slot(ted)	spirit	blanket	mobile
wallboard(s)	coarse	crush(ed)	arise	gradual
strawbale	humidity	pad	severe	toxic
efficient	_	overlap	moderate	steep
particle	porous scribing	basement	architectural	acid
mould	_			classified
click	prefabricated driveway	evaporation	unique	minimal
	admixture	apron	recycle(d)	convenient
wedge	deduct	adjoining	duration	appraisal
rebate	fungi	polymer	tilt	mandatory
skirting	skim	cove	deviation	crest
trigonometric		translucent	node	
envelope	capillary	adobe	shovel	renovation
leak(s)/	shiplap	truncate(d)	trough	tendon(s)
leakage	furniture	right-angle(d)	carcass	decibel
facilities	nut	workmanship	bale	applicator
permission	device	uplift	ply	baluster(s)
territorial	entry	underlays	reconstitute(d)	outrigger
multiply	insert(ed)	R-value	kiln	spalling
hollow	extension	instrument	girder	thermosetting
vapour	rotating	wool	actuate(d)	Douglas (fir)
warranty	caution	soldier	mansard	scotia
longitudinal	laser	multiple	housekeeping	hardboard
skillion	knot(s)	disc	broad-knife	toe-board
mask	rust	factory	weather-groove(s)	furring
bay	paste	aspect(s)	drawer(s)	feed
pine	gutter	substitution	bleed	polish(ed)
accommodate	recess(ed)	focus	occupant(s)	circulation
sketch	barge	certification	extensive(ly)	convert
evenly	splay(ed)	deterioration	utility	outline(d)
true	tensile	integrity	climate	strictly
mass	flitch	stagger(ed)	bubble(s)	universal
emergency	underside	grit	laundry	incident
competency	in-between	radius	tee	obstruction(s)
frequently	degree	zinc	respiratory	pencil
copper	native	gradient	cartridge	strand(s)
conceal(ed)	tongue	radial	scissor	thrust
fixture(s)	supervision	acoustic	warping	straw
waling	subsequent	easement	felling	fore
worksheet	enclose(d)	transom	amenities	merchant(s)
mount(ed)	dip	mullion	protruding	vacuum
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restrict(ed)	applicable	sandpaper	ledger(s)	pivot(s)
coordination	overhead	airborne	practicable	drape(d)
provision	preliminary	hold-down	perforate(d)	ribbon
tag	appliance(s)	hollow-core	fir	lime
debris	cylinder	baseplate	beech	pier
synthetic	precaution(s)	dog	skew(ed)	quarry
accessories	ceramic	atmosphere	stretcher	partition
acrylic	foam	tangent	decimal	curtail(ed)
multi	urea	estimate	mono	primer
missing	underpurlin	restraints/restrain(ed)	stirrup(s)	gantry
tank(s)	borer	scheme	trestle	banjo
modified	surrounding	majority	hydrostatic	bitumen
route(s)	expand(ed)	yield	stormwater	mastic
rubber	guideline(s)	practitioner	waling(s)	camber
bulk	radiation	consistency	swing	egress
insect	initial	ponding	cage	pigsties
slump	sum	intertenancy	feather	chamfer(ed)
condensation	delay(s)	nominal	generate(d)	swarf
latch	concept	chisel	collapse	scabble
sarking	discharge	lapped	net	basejack
switch	paragraph	stucco	proportion	sausage
tray				monitoring

Appendix 4: Sublists Eleven to Fifteen of the pedagogical word list of Carpentry

Carpentry	Carpentry	Carpentry	Carpentry	Carpentry
<b>Sublist Eleven</b>	<b>Sublist Twelve</b>	Sublist Thirteen	Sublist Fourteen	Sublist Fifteen
occupational	butyl	reverse	concave	offcut
composition	efflorescence	neutral	vermin	one-for-nothing
extent	workshop	plot	hygienic	self-weight
differ	skylight(s)	incline(d)	putty	sole-plate
entrance	earmuff(s)	exert(ed)	fluted	U-value
considerable	sapwood	prolong(ed)	shoring	solvent-based
mechanism	drywall	diamond	mortise	rough-sawn
proceed(s)	intumescent	orbital	riving	alloy-coated
comprise(s)	post-tensioning	weep	multipurpose	back-flashing
landscaping	slip-form	momentum	bituminous	bird's-mouth
upward	wood-based	hood	gambrel	blockouts
linear	tear	exempt	three-dimensional	blockwork
distortion	iron	slim	runoff	C-channel
splash	file	socket	self-employed	formply
geometry	tough	cardboard	stakeholder(s)	in-plane
webs	carbon	bulging	bricklayer	kickboard
bundle(s)	goods	scarf	loadbearing	muntin
integral	motion	radiant	entraining	oleo-resinous
stadia	trigger	dent(s)	backblock/	polysulphide
bull	blend(ed)	tab	backblocking	tawa
exotic	swelling	patio	blocklayer	tremie
tidy	stem	dummy	fairface	weather-bar
covenant	compromise(d)	alloy	finger-jointed	weather-shield
contraction	rendering	seismic	handsaw	wythe
resilient	tender	inverse	matai	
memorandum	fluid	hoarding	silane	
platinum	grease	pane(s)	totara	
convection	exit	nozzle	knock(s)	
yoke(s)	brass	jack(s)	steam	
suction	drip	apex	fan	
sine	residual	glut	fuel	
haunch	mineral	shank	strain	
footpath(s)	periphery	overalls	orientation	
undercoat	induce(d)/inducer	reciprocating	heel	
download	wax	perpendicular	spark(s)	
guardrail(s)	mat	conduit	fuse(s)	
infeed	boarding	dimple/dimpling	utilise	
offsite	maximise	slat(ted)	diminish(ed)/	

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	segregation	boron	seam/seamless	-
- U	knob	herringbone	immersion	eucalyptus

sling(s)	polyvinyl	flake(s)/flaking	plinth	
ledge(d)	dogleg	vicinity	honeycombing	
satin	galvanic	increment(s)	grommet(s)	
foreman	chainsaw	sag/sagging	docket	
	vee	demolish(ed)	tamping	
rotary	, , , ,	` '		
honing	penetrometer	jolt	monomer	
header	lean-to	granite	sties	
silt	laitance	pigment(ed)	liquefaction	
hydration	macrocarpa	lumber	kerf	
lubrication	outfeed	overloading	gabion	
scuff	strongback(s)	spade	watertight	
wafer	x-block	tint	rainwater	
convex	mouth	overlaid	walkway(s)	
extrude(d)	fault	nibbler	sea-spray	
chinking	port	chute	overturning	
gypsum	positive	chrome	particleboard	
muff(s)	rope	helical	eyepiece	
fibreglass	receiver	tripod	pinhole	
ingress	domestic	flammable	kilopascal(s)	
thermoplastic	explosive(s)	overdrive(n)	dogman	
newel	spill(s)	sabre	fibre-shear	
			kwila	
			L-trim	

# Appendix 5: 104 common Carpentry abbreviations and their meanings

4Ds	the 4Ds = deflection, drainage, drying, durability
ACQ	Ammoniacal Copper Quaternary
AP40	Type of aggregate
AS1	Acceptable Solution
BB	Bevel-backed
BCA	Building Consent Authority
BPG	Best Practice Guideline for Scaffolding in New Zealand
BU	Bracing unit
САН	Trigonometric ratio (Cosine equals Adjacent over Hypotenuse)
CCA	Copper Chrome Arsenate
CCC	Code Compliance
CLL	Certificate
CPM	Critical Path Method
crs	Centres
dB	Decibels
DBA	Decibels (acoustic)
DBH	Department of Building and Housing
DI	Internal diameter
DOL	Department of Labour
DP	Deposited Plan
DPC	Damp Proof Course
DPM	Damp proof membranes
EIFS	Exterior Insulation and Finish Systems
EIM	Eliminate, Isolate or Minimise the hazard
EMC	Equilibrium moisture content
EPDM	Ethylene Propylene Diene Monomer
EPS	Expanded polystyrene
FFL	Finished floor level
FFT	Flexible flashing tape
FGL	Finished Ground Level
FOPS	Falling Object Protective Structure
FSP	Fibre saturation point
GALV	Galvanised
GIB	Gibraltar board
GLULAM	Glued laminated timber
GRC	Glass reinforced concrete
H1	Building Code Clause H1 (Energy Efficiency)

H1.1 H1.2 H3.1 H3.2 H4 H5 = hazard class that determines LOSP treatment

HBG House Building Guide

HEX Hexagonal

HIVIS /

HIVIZ High Visibility

HSE Health and Safety in Employment (Act)

IGU Insulated glazing unitIIC Impact insulation classITP Inspection and test plans

kg Kilogram kN Kilonewton kPa Kilopascal

LIM Land information memorandum LOSP Light Organic Solvent Preservative

LVL Laminated veneer lumber

M12
M16 bolt
M2
Square metre
M3
Cubic metre
MC
Moisture content

MDF Medium density fibreboard

ML Millilitre
MPa Megapascal
MS Modified Silane

MSDS Material Safety Data Sheet MSG Machine Stress Grading MSG6 Machine Stress Grading 6

NASH National Association of Steel Framed Housing

NZHPT New Zealand Historic Places Trust

NZS New Zealand Standards

OSH Occupational Safety and Health

PEF Polyethylene foam

Pi 3.142

PIM Project information memorandum
PPE Personal protective equipment

PS1 Producer statement 1
PVA Polyvinyl Acetate
PVC Polyvinyl chloride
RCD Residual current device
RH Relative Humidity

WB

WC

Z

Weather board

Z-factor = a measure of statistical effect size

Water Closet

RHS	Rectangular hollow section
RL	Reduced level
RMD	Rapid Metal Developments
RPM	Revolutions per minute
RWB	Reconstituted wood based sheets
SED	Specific Engineering Design
SHS	Square hollow section
SOH	Trigonometric ratio (Sine equals Opposite over Hypotenuse)
STC	Sound Transmission Class
T01	Common Truss
TA	Territorial Authority
TAN	Tangent
TCR	Top Cross Rail
TG	Tongue and Groove
TLCR	True Length Common Rafter
TLHR	True Length Hip Rafter
TLMCR	True Length Major Common Rafter
TLMHR	True Length Major Hip Rafter
TOA	Trigonometric ratio (Tangent equals Opposite over Adjacent)
TPI	Threads per inch
UB	Universal beam
uPVC	Un-plasticised Polyvinyl Chloride
UV	Ultraviolet
VM	Verification method
VSG	Visual Stress Grading

# Appendix 6: 28 common Proper Nouns in Carpentry

Aqualine Braceline

Branz
Ecoply
Ezybrace
Flexibrace
Fyreline
Gantt
Goldline
Handibrac
Hiab
James Hardie
Kraft
Mitek
Noiseline
Portland
Pozistrut
Pozi
Ramset
Rondo
Scala
Sika
Soundseal
Tradeset
Ultraline
Victor
Winstone

# USING LISTENING PORTFOLIOS TO PROMOTE AGENCY IN ENGLISH LANGUAGE LEARNERS

# Martin Andrew Victoria University, Melbourne

#### **Abstract**

The multi-item listening portfolio is an effective instrument for formatively and summatively assessing adult learners' independent acts of extensive listening over time. Framed by studies of strategic English as an Additional Language (EAL) learning via portfolio, this paper uses a qualitative descriptive analysis of ten students' reflective portfolios to evaluate a situated pedagogical approach to the learning and assessment of extensive real-world listening in an EAL degree program at a tertiary institute in Auckland. The study supports the use of a pedagogy that demonstrates and practices key strategies via a flexible listening portfolio that students develop over the duration of a programme. The students emerged with what one participant calls "memorable and meaningful tools" for his future life. The study suggests the innovation of the listening portfolio may open the possibility for students to develop future identities as agential participants in communities (Toohey & Norton, 2003), not merely students instrumentally completing listening competency tests.

I developed self-awareness of listening strategies when I expose a variety of listening and spoken language outside the classroom... In the past, my main purpose was to understand the content without analysing. Today I equip myself with these strategies in my everyday life. They are memorable and meaningful tools for me (Mora, Somalia)

# Introduction: The problem with listening

This paper reports on a project involving implementing a relatively innovative teaching and learning tool, the multi-item listening portfolio, into a first-year tertiary unit in English as an Additional Language (EAL) at a tertiary institute in Auckland. The unit *Spoken English in Practice (SEIP)* needed curricular renewal to increase adult learners' confidence in extensive listening and to apply their strategy-based learning to real-life interactions in the domains Benson and Reinders (2011) label 'beyond the classroom'.

The problem facing curriculum designers was motivated by learners' complaint that learning listening through conventional classroom-based materials such as International

English Language Testing System (IELTS) testing products and the semi-authentic materials available in self-access centres did not help them to engage in authentic, communicative transactions beyond the classroom. Moreover, even if they could find opportunities, they reported being 'lost' in face-to-face or telephonic transactions with local people because of such factors as the speed of speech, the challenge of following word-by-word, and the use of colloquialisms. This suggested the need to incorporate the paralinguistic and suprasegmental features of speech, opening the possibility of using such semi-authentic CALL resources as *Connected Speech* (2005) and *Pronunciation Power* (2004). It also suggested the need to find opportunities for learners to document and reflect on their listening events beyond the classroom.

More specifically, the challenge was to create an authentic learning and assessment tool where learners produced an "album of literacy performances" (Ferris & Hedgcock, 2005, p.322) and reflected on a real-world element (Power, 2010). Drawing on recent insights into the learning value of writing portfolios (Romova & Andrew, 2011), the SEIP team created the listening portfolio as a learning and assessment task that enabled students to reflect on listening strategies rehearsed in class and practiced beyond the classroom. Portfolios have other affordances: to evaluate their real-world listening transactions, and to charter their engagement with CALL programmes and their increasing awareness of such features as connected speech, elision and changing pitch. The area of pedagogical innovation in extensive listening in authentic L2 contexts has been acknowledged as under-researched (Boonkit, 2013; Renandya & Farrell, 2007; Vandergrift & Goh, 2011) while empirical studies of listening strategies for comprehension are well represented (Hsiao & Oxford, 2002; Richards, 1997). This paper describes and evaluates students' experiences of applying and learning from strategies used in extensive listening across a variety of authentic, face-to-face and CALL-mediated contexts beyond the classroom. Such an investigation requires a movement from the strategic into the metacognitive, where students gain awareness of how they learn through the application of strategies.

In addition to the challenge of renewing the listening curriculum, what research questions give this study its focus? As well as considering the broader evaluative question of the benefits of listening portfolios as pedagogical and assessment tools, I ask how learners' experiences of learning via listening portfolios impact their agency. Agency is conceived as a co-negotiated relationship between the educative context and the world beyond the classroom that engages students' learning, changing identities, and ability to act with initiative in the social world (Gao & Lamb, 2011; Hunter & Cooke, 2007; Kohonen, 2000; Manosuthikit, 2008; Norton & Toohey, 2003).

The importance of agency as a goal for EAL programmes targeting migrants, refugees and international students is one of four key frames discussed in the literature review. In

addition to considering fostering agency, I discuss research into listening portfolios, survey key studies linking teaching and learning via a strategic approach to metacognition and discuss research highlighting the centrality of reflectivity for alerting students to their progress and to *how* they see themselves as learning.

#### Background: Listening portfolios in SEIP

In this section I introduce the curriculum of *SEIP* and describe the elements of the listening portfolio, considering the role of reflection and exemplifying strategies.

#### Curriculum

SEIP, a year-one, degree-level unit focusing on applied speaking and speech, runs for three hours weekly for 12 weeks and applies methods to increase confidence in extensive listening contexts and strategies for listening to one-way and interactive spoken texts and events.

One hour per week occurs in the language lab, where a directed sub-curriculum utilizing such applications as *Connected Speech* and *Pronunciation Power* trains students to identify and emulate paralinguistic (gestures, facial expressions, tone and pitch) and prosodic or suprasegmental features of speech (stress, tone, word juncture). These features, to summarize Flowerdew and Miller (2005), encompass phonological contractions and assimilations; hesitations, false starts, filled pauses; sentence fragments; structures according to tone units rather than clauses and occurrence of discourse markers at beginnings or endings. All of these are covered in the curriculum. Class activities and tasks include student reviews of useful websites/digital listening resources via group presentations, and dictation and dictogloss training to focus on key words, stress-timing, pitch and intonation using both embodied and recorded voices. Students are encouraged to self-access the lab outside class and to incorporate their learning as possible entries in their portfolios.

The other two hours are dedicated to applying listening strategies (weeks 1 to 8) and creating a listening portfolio beyond the classroom; and to performing a semi-authentic information-sharing group task (a webquest) that culminates in group presentations (weeks 9-12).

# Elements of the portfolio

Students are told to complete an average of one portfolio item per day for eight weeks and complete a portfolio grid such as that in Figure 1. Students name their text or event, identify target strategies, evaluate the effectiveness of the strategy in context and reflect on how they might employ the strategy differently in the future. Borrowing from

Flowerdew and Miller (2005), the design of the portfolio allows learners to incorporate the eight dimensions of L2 listening. Their choices of listening texts and events should be *individualized, cross-cultural, social, contextualized, affective, strategic, intertextual* and *critical*. Learners are told to select texts and events that interest and challenge them across many genres and enable them, firstly, to apply strategies, which they can nominate in advance according to their perception of their needs, and/or secondly, to interact communicatively in a definable social context.

Item	Source/Resource	Strategies Used	Effectiveness of Strategy	Reflections for
No.	Used		(and Reasons)	Improvement
1	Listening to NZ Unit 1B Lecture	1 Listen extensively to the lecture. Pay attention to the discourse markers, eg: firstly, the second thing is, later, fist of all, let's turn to, etc. 2 Take notes. Do the	Discourse markers help me grasp the key points/ sentences.     Note-taking is really helpful to record key points and main idea.	Re-examine logical meanings of discourse markers     Write down new words to remember.Use English – English dictionary.
2	Face to face	exercises after listening.  1 Prepare introducing myself,	1 I was confident because I'd	Check with transcript     Listen carefully to key
	Communication with NS Be interviewed with the manager of CAB for 15 minutes	the answer to the relevant questions, and what questions I would like to ask. 2 Repeating to make sure what the interviewer exactly asked.	prepared well in advance. 2. I predicted the questions. 3 I've now had an NZ interview experience.	words (The manager was speaking very fast.) 2 Try to bear in mind what NS said about NZ common words expressions and idioms.
3	Telephone – live Seeking information from IRD	1 Predict content and vocabulary 2 Ask caller politely to repeat in case of not understanding, and repeat to check understanding of information	1 I felt confident on hearing target words 2 When the caller didn't understand me, I tried to restate or paraphrase	1 Concentrate and listen carefully because we can't use body language. 2 Practise phone manner with the book "Telephoning in English".
4	Face to Face Communication Jehovah's Witnesses	Use as unexpected chance to practice clarification and paraphrasing skills	1 I was confident to ask for clarification about words and concepts, but they spoke too slowly.  2. I practised paraphrasing with 'So you're saying"	1 Realise that I might need listening strategies and speaking gambits at any time. 2 Seek natural ways of using NS to practice listening.

Figure 1: Authentic sample page from Listening Portfolio of participant 'Jean'

Students were explicitly instructed as to what 'reflection' entails. Kathpalia and Heah (2008) argue that providing clear definitions of reflection is essential if students are to understand the linguistic, cognitive, affective, and social dimensions of their learning. Students used Boude, Keogh and Walker's (1985) conception of reflection as "a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations" (p. 19). Reflectivity is crucial, Kathpalia and Heah (2008) maintain, to any pedagogy, unpacking the intersections of process and product, and vital, Gao (2013) argues, for distinguishing the sociocognitive concept of autonomy from the sociocultural and liberatory concept of

agency. In another study I have shown how reflectivity enables students to visualize their progress in applying strategic learning to their lives (Romova & Andrew, 2011).

Anderson (2005) defined learning strategies as "conscious actions that learners take to improve their language learning" (p.757) and Wenden (1997) linked them explicitly to autonomy. As examples of strategies, learners might notice voice emphasis, repetition and such verbal cues as 'signpost' words signaling stages and functions, or listen for lexis, particularly field-specific and regional lexis. They might listen to fast speech for gist, applying listening strategies to televisual or media experiences. Learners might use other media or resources in advance (reading a newspaper story before listening to the news that day) or following an activity (writing a summary of the story and then checking the newspaper again).

## Literature Review: Framing the study Listening Portfolios

Three studies consider listening journals or portfolios (Chen, 2007; Ducker, 2012; Boonkit, 2013) in English as a Foreign Language (EFL) contexts, in Taiwan, Japan and Thailand respectively. All three studies are born of the observation that students need more extensive listening practice for communicative participation in a globalized world. In each case, the use of reflective journaling established a habit of listening that was motivating. Ducker (2012) found evidence of autonomy but not investment in his study of listening portfolios as a vehicle for Japanese learners practicing extensive listening for university matriculation purposes. Chen's (2007) study provides an instance of Taiwanese students willing to take responsibility for part of the assessment of their listening learning. In a Thai study, Boonkit (2013) demonstrated that the listening portfolio enables learners to work semi-directedly but independently in their own time and space, selecting texts that appeal and motivate them.

Two further studies, in Finland and Turkey, also made clear the innovative nature of the listening portfolio. In the context of the European language portfolio (ELP) in Finland, a study by Kohonen (2000) concluded the portfolio makes visible links between learners' autonomous learning and pedagogical ways of fostering it. In a constructivist study of the use of portfolios, including listening portfolios, in secondary classes in Turkey, Yurdabakan and Ergogan (2009) wrote: "portfolio assessment in foreign language teaching can contribute to the students' taking responsibility towards their own learning, discovering suitable learning strategies and contexts, and identifying goals for their future learning" (p.528).

Ferris and Hedgcock (2005) emphasised that listening portfolios need to record students' adventures with *authentic* interactive contexts involving real-world listening and

attending to the features of speech. Power (2010) asserted that *authentic* assessment, involving reflecting on a real world element and including a service-learning component, prepares learners for authentic living and strengthens community belonging. Rost (2002) argued that, to be effective, attending to or 'noticing' a new feature must occur in an authentic context because the listener's instinct is to build meaning. The theory is that when a listener hears a word encountered in a classroom or educative context in the real world, spoken by real people, the consolidation of lexical learning occurs.

In addition to authenticity, Ferris and Hedgcock (2005) identified nine other characteristics of portfolios that inform the design of *SEIP*'s curricular innovation: *collection* involves all texts being in one place; *selection* emphasizes learners' choosing entries for inclusion; *communication* is the component that allows the development of social identities; *range* refers to evidencing an authentic variety of texts; *context richness* means having a pedagogically and ideologically clear context; *delayed evaluation* enables a retrospective, holistic evaluation of the portfolio as the dynamic product of a work in progress; *[listener]-centred control* means the student is responsible for how the portfolio represents their progress; *evolution over time* is the longitudinal element that accommodates multiple performance circumstances; *measured progress* means there are clear guidelines to ensure learners understand the task expectations; *reflection* enables iterative learning in action and on action, and, finally, *evaluation* refers to listeners' self-appraisals of performances.

### Strategy-focused instruction and metacognition

The primary purpose of strategic instruction is "to raise learners' awareness of strategies and then allow each to select appropriate strategies to accomplish their learning goals" (Anderson, 2005, p.763). Chamot (2004) wrote that explicit strategy instruction involves, firstly, developing students' awareness of appropriate strategies and, secondly, pedagogical demonstrations of the strategies applied to authentic texts followed by practicing with similar applications and evaluating their use of various strategies. The fifth stage, where students transfer learning to new contexts, is where metacognition is important. Being aware of strategy use and monitoring and evaluating it is part of the process of implementing and enacting strategies in sociocultural contexts (Rost, 2002).

Research identifies the potential link between strategy instruction and metacognition that the listening portfolio captures. Flowerdew and Miller (2005) emphasized the learning dimension of any L2 model of listening needs to identify specific listening strategies beneficial to acquisition. Hsiao and Oxford (2002) classified L2 learning strategies as cognitive, metacognitive, mnemonic, compensatory, affective and self-motivating, and social. Anderson (2005) argued that learners free up cognitive capacity as they move from the thinking stage to the use stage. In considering why some students have more success than others, he maintained: "the difference is in how the strategies are executed

and orchestrated" (p.762). The listening portfolio potentially allows learners to reflect and try again; a function of metacognition.

Metacognition promotes agency as it empowers learners to think about their learning analytically, reflectively. Anderson (2005) wrote: "metacognition results in critical but healthy reflection and evaluation of your thinking and may result in making specific changes in how you learn" (p.767). Vandergrift (2002) concurred, arguing that metacognitive strategies crucially oversee, regulate, or direct language learning tasks. This activation of strategies, he argued, involves learners thinking about the learning process, activating metacognition. As in listening portfolios, metacognition is tied to learners' exercise of agency in moments when they report taking charge of learning. This study also establishes that explicit strategic learning operationalizes metacognition or learning about learning.

#### Agency

This study argues that listening portfolios are a pedagogical and assessment tool enabling learners to monitor their application of listening strategies beyond the classroom and reflect on their success, building pen-portraits of themselves moving towards agency. In their Turkish study, Yurdabakan and Ergogan (2009) also linked portfolios to learners recording incidences of agency. Gao and Lamb (2011) described "agency" as a concept allowing the convergence of identity, motivation and autonomy in applying real-world skills to future communities. Gao and Lamb's (2011) notion of agency moved beyond conceptualizations of agency as personal initiative and intellectual engagement. They argued it encompasses the building of metacognitive awareness by acquiring skills to helps learners (listeners) monitor their own learning and co-construct it with those in their social worlds. Anderson (2005) conceptualised these metacognitive skills as planning (advanced organization, directed attention, selective attention and self-management), monitoring (comprehension monitoring, auditory monitoring and double-check monitoring) and evaluation (performance evaluation and problem identification). These processes of metacognitive progress are mirrored in the structure of the listening portfolio.

Gao and Lamb (2011) reference what Norton and Toohey (2003, p.58) called "autonomy as agency" in sociocultural settings. Agency, they write, involves interaction with the social world and using its practices. Learners can develop it; teachers can foster it (Hunter & Cooke, 2007) and structure opportunities for it (Norton & Toohey, 2003). Manosuthikit (2008) wrote that agency entails the ability to assign relevance and significance to things and events, and the listening portfolio incorporates space for learners to demonstrate this process. Hunter and Cooke (2007) view agency as a conegotiated relationship that engages students' learning, changing identities, and ability to

act with initiative. The portfolio can be seen as a map of learner progress from initial tentativeness to potential agency.

#### Reflectivity

Anderson (2005) reported reflective diaries and inventory-portfolios are rich sources of reflective data for researchers and useful methods to enable learners to gain metacognitive insights into their cognition and affect. Reflective diaries are places where learners record their stories of their emergent identities (Nunan & Choi, 2010). Reflectivity occurs when students evaluate their progress in applying 'target' strategies to their lived experience (Romova & Andrew, 2011). Importantly, students' reflections need to feed back into teaching and learning (Lam & Lee, 2009). By incorporating reflectivity into the portfolio, both as a regular activity and as a separate retrospective task at the end of the assessment period, both lecturers and students can see evidence of the application of targeted strategies and, importantly, students' records of their developing confidence in listening beyond the classroom.

#### **Participants**

Thirty-five students of *SEIP*, adults aged 22 to 60, participated in the project. They identified as migrants, international students, and refugees. In this study, I focus on ten students purposively sampled from the larger group. All participants described their imagined future in their reflective memos and signed consents. In the table below, the ten participants in the current study are represented by pseudonyms.

Table 2: *The participants* 

Pseudonym	Age range	Nation of origin/ status	<b>Desired future</b>
Cara	20s	China (International)	'Commerce degree'
Eric	20s	Taiwan (Migrant)	'Study psychology'
Fraser	60s	China (Migrant)	'Become Kiwi'
Hera	20s	Ethiopia (Refugee)	'Work with kids'
Javed	50s	Pakistan (Migrant)	'Be useful'
Jean	30s	China (Migrant)	'Get a job'
Mary	30s	South Korea (Migrant)	'Work'
Mira	30s	Japan (Migrant)	'Study, then work'
Mohammed	40s	Eritrea (Refugee)	'Learn local culture'
Mora	30s	Somalia (Refugee)	'Work in schools'

#### **Data collection**

The participants submitted portfolios recording their views on the effectiveness of strategies used in authentic listening events, either in-person or using digital texts and learning technologies. These covered an eight-week period. They also wrote, in week 9, reflective memos commenting globally on notable areas of improvement and evaluating the usefulness of strategies for their learning.

#### Data analysis

This paper uses qualitative descriptive methodology (Sandelowski, 2000) to produce narratives incorporating thematic analysis of both the listening portfolios and the memoranda. For data presentation, I present these reshaped thematic storylines, including moments of surprise, critical moments or what Sandelowski (2000, p.337) called "moments of experience".

This naturalistic data analysis method uses theoretical sensitivity (the constant comparison method to 'know' the data in different ways and perceive convergences) and content analysis techniques that allow the target phenomena to present themselves naturally (Polkinghorne, 1995). My application of "evolved" constructivist thematic analysis uncovered three major themes while actively repositioning the researcher as the author of a reconstruction of experience and meaning (Mills, Bonner & Francis, 2006). My own experiences as curriculum designer/lecturer/researcher permeate the narratives, adding an autoethnographic strain that is a virtue, not a limitation. By way of findings, three interconnected narratives based on three dominant themes are presented: the future value of strategy-based learning; enhancement of 'confidence', and 'moments of experience'.

### Narrative 1: The future value of strategy-based learning

The majority of students claimed not to have encountered a strategic approach to practicing listening before. Mira assumed her listening would simply improve over time; the existence of strategies surprised her. Jean saw strategies as the "missing link" in her learning journey towards "progress". Hera wrote that before taking this course she "was not really clear in [her] mind about what listening strategies were". She added, "I was always interested in the message what was being said rather than how it's being said", and credits the strategy-based approach for her perceived improvement: "As the result of listening strategies I can say that my listening and speaking are getting better". Mora made a similar comment: "In the past, I was not able to figure out my language weakness and my main purpose was to understand the content of the topic without analyzing the language".

A strategic approach brings the students closer to being able to notice the detail of stretches of speech in the real world. Cara was amazed at the closeness of the learning she attained through employing the techniques of dictation and transcription, quantifying her learning lexically: "through dictation, I have learned new words like *dodgy, prompt, rancour, wreckage* and *hypothermia, etc.*" Mora's enhanced awareness was more phonological: applying strategies regularly "gives me the opportunity to analyze spoken language and also identifying the linking words, pitch, intonation and rhythm". Cara spoke of her first time "to notice and hear linking clearly used by native speakers" and called it "a very natural way", not a strategy. Now, she evaluated, her deductive ability has increased. The metacognitive act of "noticing" both lexis and suprasegmentals led to learning. Fraser described his learning to be a process of "grasping" and then "using" strategies:

I thought I had got enough listening methods before [teacher's] demonstrations of intonation, pitch change, linking and the stress make me realise that I had not built up knowledge to truly grasp these strategies, let alone use them. Through learning these rules, I found myself making a big jump in listening.

Similarly, the strategy-based approach impacted Javed: "I used to listen to the radio and TV but never understood as better as now, and this all happened after adopting different extensive and intensive strategies". Here we see the listener monitoring and evaluating himself by applying a process of noticing.

Making the journey from the classroom to the real world is a resonant theme, exemplified by Cara: "I'm starting to realize that I'm actually using these strategies more and more when I communicate with native speakers". The act of portfolio writing, incorporating repeated self-monitoring, led to metacognitive realization. Mary also demonstrated how an act of metacognition led to an understanding about preparing for communicative events:

Through this listening portfolio, I find these listening strategies, such as preparing for listening, are very useful. When I watch TV news or listen the radio report, I can write down the words based on similar sounds, then look up the dictionary or ask a native speaker to get the new vocabulary.

Utilsing the metacognitive strategy of planning, she has been empowered with agency: she knows and uses techniques to apply in real world listening situations. This is also why Mora called the portfolio "an efficient way to improve my listening outside the classroom". In his memo, Eric professed: "I think it is not the end of this portfolio, it is the beginning of our learning English". He is planning forward for future applications of his strategic learning; he is headed towards agency.

#### Narrative 2: Enhancement of 'confidence'

Narrative 1 indicates a future-orientation in the use of listening strategies, and this, notably Fraser's "big jump", implies enhanced confidence. Eric was outspoken:

All these methods indeed help me to increase confidence in two-way activities. However, sometimes my too much enthusiasm may give people an unpleasant impression. Anyway, I decided to be ready to risk everything in order to master English language. If English speaker can say it, so can I.

The word 'confident' is the most recurrent word in the data, signifying learning capital as something learners either gained or felt they had underestimated before. Javed offered a typical instance: "I have figured out my special problems and trying to do something about them. I have overcome my feelings of frustration and lack of confidence. In fact, I am really happy that these portfolio tasks provide me a chance to evaluate my listening skills".

This discovery comes from interaction with real world texts, both one-way and two-way. Jean studied *TED*, *BBC* and *CNN* websites with transcripts: "As a result of it, I feel more comfortable about the announcers' speed now". In a face-to-face context, she invited Jehovah's Witnesses in to talk, at first seeing them as a safe opportunity to practice strategies, but later seeing deeper learning potential:

I took part in a Bible study group. While I am talking with them, I focus on their colloquial expressions such as 'take pot luck', 'it's my shout'. I also focus on some technical words such as 'apostate' and 'apocalypse'... I've learned a lot and am getting more confident.

The feeling of confidence comes in part from a feeling of increased belonging, but also comes from confidence that she can notice idioms and field-specific lexis to use in her community. Similarly, Hera, at daycare, used gambits in small talk with parents: "As a result, my self-confidence...increased in terms of making native speaker friends". She also goes on to list some of her field-specific lexical learning. Below is one example, and her response:

*Plenty more fish in the sea:* means there are many more people to choose from. In this type of circumstance I go and ask a native speaker to translate them for me if I don't know them.

Javed reported a similar phenomenon, and this serves as a suitable coda for this theme: "Before this course I never thought that I can be able to understand native speakers so much".

#### Narrative 3: 'Moments of experience'

The data are rich with descriptions where learners detail their application of strategies to real world texts and evaluate their impact:

I listened to the BBC news nearly every day and I started to use the strategies to improve my understanding. For example, I took notes while listening and compared my notes to the summary, and then went back to listen again. (Cara) In order to improve my gaps in listening for stress and intonation, I can practice using our key resources. I think motivation is very important to every student. If no motivation, no practice. (Eric)

Similarly, Mora observed: "language without practice cannot be kept and sustained in our mind". Such anecdotes evidence both students' perceptions of progress and their application of metacognition about how correctly applying strategies enhances confidence.

Such minor epiphanies are moments of experience. Mary listened repeatedly to a news story. Confused at a term that sounded like *baby boomers*, she used contextual knowledge and repetition to deduce the idiom and work out its spelling. Asked at a job interview what her interests were, Mira told her (American) conversant that she liked to *go tramping*, and was placed in a situation of having to explain an ambiguous idiom to a native speaker. Eric spent his holidays watching movies, the first time without and the second time with subtitles, using contextual cues to guess meanings. "It really worked!" he reports.

While lexical moments of surprise are dominant, there are others about strategic phonetic listening and the application of listening techniques. Hera overheard a co-worker say "I don't think he SHOULD get the job" and puzzled out the meaning with that sentence stress, noticing that a stress of 'HE' would change the meaning in a more personal way. Javad set himself the task of saying "I'd really like a cup of tea" in conversation with "schwa and linking", and believes he was able to capture the stress-timed nature of English. Eric had difficulty conversing with his Japanese friend. He discovered that "if I used strong form and weak form strategy in my conversation, I could make my speaking faster and he would understand me". Terrified of the local accent, Fraser dared to phone his internet provider. He brainstormed some technical and functional language in advance, and found himself able to predict the operator's questions and deduce her meanings.

'Moments of experience' make their way into learners' portfolios and reflective memoranda because for the students they are small-scale breakthrough moments. Portfolios, covering eight weeks, themselves narrate a story: Mohammad observed many features (question and statement pitch, noun stress) in interviews on familiar African

topics in week 1, and by week 8 was listening to features of New Zealand speaking in documentaries, and talkback radio, promising he would "try to listen and if I found chance to participate any argument to build a good understanding of English so I will try to ring Radio New Zealand". His next entry described his appearance on talkback radio, opposing allowing women in the military. In his final entry, he did a telephone interview for an interpreter's job with *Kiwi Ora*, introducing himself as bilingual. Such narratives suggest emergent agency.

#### **Discussion**

The key elements of strategic portfolio pedagogy for extensive listening are practice-based application of strategies and reflection on or evaluation of performance in action. In the findings, it is clear the listening portfolio creates opportunities for listening but that to be successful necessarily requires investment. In terms of curriculum management, linking it to assessment ensures *SEIP* lecturers do not face Ducker's (2012) dilemma: students lacking motivation. A desire to move beyond an investment in assessment towards a social one involving communication in communities can be observed, as Mohammad's trajectory illustrates.

The findings confirm the portfolio offers advantages such as those itemised by Ferris and Hedgcock (2005): it encourages the use of CALL, technology-mediated texts and language learning specialists, for instance, as real world resources. Further, it develops applied strategies and encourages the use of criticality in evaluating the usefulness of chosen resources, as Hera did. Other benefits are that it ensures learners select their own texts, as Mohammad did, and monitor what works for them. The narratives suggest this activates metacognition and that learning is individualized. The narratives demonstrate how the listening portfolio provides a record of learning in applied listening over time across a range of genre and media, and as such provides a valid record for assessment purposes.

In the narratives, students not only respond strategically to listening events, but plan for them, metacognitively processing the strategic effectiveness of their communications as Mary and Cara did. The data reports success stories and increased confidence is also reflected in the students' work, exemplified by Mohammad's trajectory. However, references to overcoming struggle are common, and the overriding master narrative is epitomized by Mora's desire to "equip myself with these strategies in my everyday life. They are memorable and meaningful tools for me". The strategies can be tested widely, and individuals can select individual tools that suit their learning styles, contexts and needs.

The moments of experience described above are articulations of Rost's (2002) theory of noticing. Encouraged to *notice* by the knowledge they would write portfolio entries, Mira and Jean had wondered why their listening was not improving automatically. Mora, Javed and Cara demonstrate moments where they became aware that they were in fact noticing; where they witnessed their own learning when they reflected on the effectiveness of their use of specific listening strategies. There are glimpses of agency where the students find themselves empowered by applying their learning in a meaningful way with ontological results: Jean's "confidence" and Fraser's "big jump" exemplify this phenomenon. We witness the kinds of autonomy Wenden (1997) identified in the learners' monitoring of their listening performances, but we also observe learners such as Jean acting with initiative in the social world. A listening portfolio allows students to discover strategies that work for them. The process of learning offers them the possibility of moving beyond autonomy to agency. Learners engage in communities where they can hold active identities not as learners, but as communicators.

#### Conclusion

This study argued that teaching and assessing extensive listening via a portfolio embeds autonomy as agency into strategy-based instruction, transcending the instrumental and impacting the personal. Language educators are urged to implement and evaluate such modes of authentic assessment as listening portfolios. They allow learners to monitor and evaluate their development, progress and performance in semi-authentic contexts, such as CALL programmes, and, moreover, in authentic contexts beyond the classroom. This study suggests teaching interventions that offer opportunities for learners to apply strategies in social contexts activates the socio-affective aspect of metacognition, leading to a realisation of real progress and an enhancement of confidence.

The project demonstrated how listening portfolios, incorporating reflection, present an authentic and motivating mode of recording incidents of listening for learners, also offering formative and summative possibilities as an assessment tool for educators. Importantly, reflection enables learners to evaluate their use of listening strategies, enhancing their awareness of these 'memorable and meaningful tools'. Portfolios reveal new learner identities, ones that demonstrate an awareness of preparing and planning, identifying, monitoring, orchestrating and evaluating strategy use. In the narratives describing the learning value of portfolios, learners reported stories of developing autonomy as agency. They become social beings communicating with real initiative.

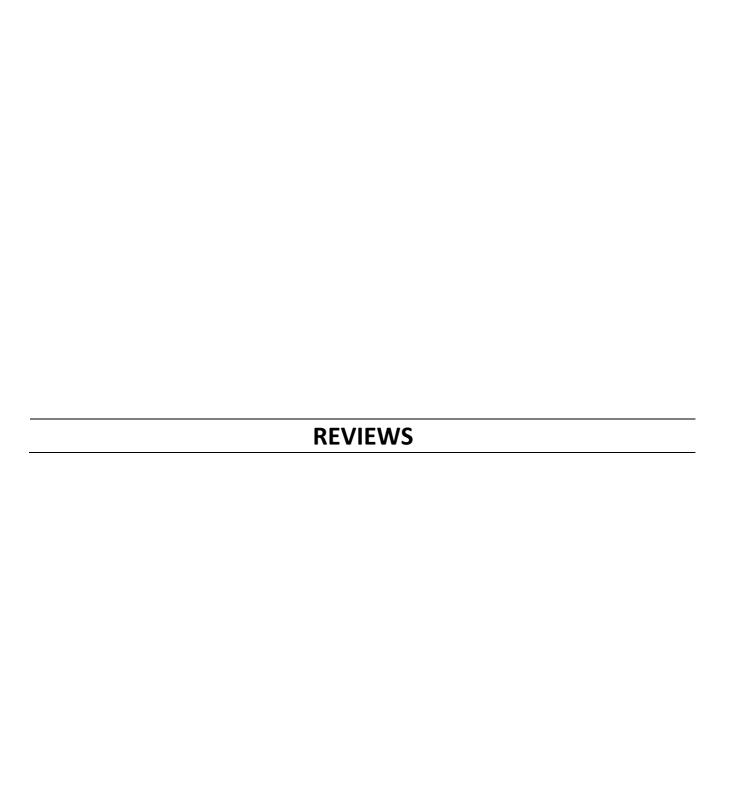
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# Bunce, P. Phillipson, R., Rapatahana, V. & Tupas, R. (Eds). (2016). Why English? Confronting the hydra. Bristol, Buffalo & Toronto: Multilingual Matters. ISBN 978-1-78309-584-1 (hbk.) 285pp.

#### **Reviewed by Patrick Coleman, Lincoln University**

The globalisation of English and English as a part of export education are usually lauded as positive developments. Educational institutions earn money and the students learning English gain greater access to educational and employment opportunities. This rather upbeat picture of English seems to provide benefits to all parties. The current volume presents a much darker side to this situation. Why English? Confronting the hydra is a part of a series that previously published English language as Hydra: Its impacts on non-English language cultures (2012). That series focused on the negative impact that English has had on indigenous languages. In Greek and Roman mythology, the hydra was the mythical beast that grew multiple heads every time one was cut off. The English language as a hydra is presented as an active player in the linguicide of indigenous languages.

The authors claim they 'are not against English' (p. 1), but their targets are the structural and ideological forces that promote English at the expense of indigenous languages. They paint a picture of the divisions between the elites with access to English and those who lack this access. While most introductions to an edited volume generally summarise the subsequent chapters, this volume is a little different. The almost politicised nature of the series is laid out in a fairly forceful manner. There are many targets that the editors skewer in their introduction. While this is understandable given the emotions around language loss, it almost reads like a polemic at times, rather than an academic text.

Part 1 incorporates chapters 2-5 and outlines the destructive effects of English, particularly in Africa and Asia. Much of the rhetoric is around the neocolonising aspects of English. All authors use the hydra analogy to great effect, especially chapter 1 as it notes the so called fight back by the Arabisation that occurred in the Sudan. It could be argued this is simply one hydra language supplanting another. In Chapter 2 the British Council comes in for scathing criticism for its role in linguistic imperialism, as it seeks to promote English to the detriment of local languages. Chapter 3 posits the quite complex case of Indonesian. Here the author notes the chain effect of English, Bahasa Indonesia and local languages as the first two have a potentially destructive influence on the latter.

Part 2 encompasses chapters 6-13 and focuses on the myths associated with English language learning. Chapter 6 looks at contemporary Japan and challenges 'the global language myth and the economic benefit myth' (p. 77) of English language learning.

The authors cite examples of languages other than English being needed globally and that workers do not always get economic benefits from learning English. Chapter 7 is a letter from Hilary Smith (former president of TESOLANZ) to Lloyd Jones, author of the novel *Mister Pip*. Smith challenges Lloyd's depictions of life and teaching in Bougainville. She highlights the absurdity of children being enthralled listening to the English teacher reading large extracts of Dickens. A response from Lloyd to justify his choices would have been enlightening.

Part 3 covers confronting the hydra for chapters 14-17. Each of these chapters documents the fight by countries to maintain their indigenous languages. Chapter 14 uses the hydra analogy to full effect in Mauritius, which has had to deal with the two hydras of English and French. Over 87% of Mauritians speak Mauritian Kreol and yet it was not a part of the school curriculum until 2012.

Part 4 comprises chapters 18-24 and deals with resistance and cohabitation with the hydra. Unlike many of the other chapters, these final chapters take quite a different turn. There are some insightful personalised reflections and thoughts of English language teachers who have begun to question their role in the English language teaching industry. The section finishes with two short poems by one of the book's editors, Vaughan Rapatahana. Each poem is perceptive and a little subversive.

The various authors throughout this collection convey a sense of anger and frustration at the multiplicity of policies and methods by which their languages are being eroded and sidelined. However, it does feel as though the metaphor of the hydra has been overused. While it can be argued that English has been used as a form of linguistic imperialism, it is hardly the only language that has done this; Arabic and Mandarin are notable examples. This volume would be a great text for both educators and students to explore the multiple ways and means English has impacted on indigenous language loss. The editors note the sense of irony in publishing their volume in English. Actually if they want to be truly champions of indigenous languages, each author could publish their contribution in their own language.

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Haworth, P. & Craig, C. (Eds). (2016). The career trajectories of English language teachers. Oxford, 2016. Oxford, UK: Symposium Books. ISBN 978-1-873927-87-8 (pbk.) 256 pp.

Reviewed by Cynthia White, Massey University

English language teachers have long been called upon to narrate something of their career trajectories, generally in quite high stakes contexts, such as in job interviews, in applications for professional development programmes, or when applying for entry to particular qualifications or degree programmes. The significance of these narratives tended not to be seen beyond what were, in effect, selection processes. This is somewhat surprising given the shifts in understandings in English language teaching whereby we now see teachers as socially located people who bring their biographies and subjectivities to their work. In terms of research we have witnessed a number of shifts all of which align with the focus of this volume, *The Career Trajectories of English Language Teachers*: we are now interested in individuals as much as groups or populations of learners or teachers, and we are also now interested in the emic lens that teachers bring to their experiences, actions and practices. In addition our interest now tends to focus on the search for particular understandings of phenomena, the variability in phenomena and the complex, dynamic nature of what we are seeking to understand.

The contributors to this volume bring together theory, research, practice and personal reflections in a rich array of narrative accounts of the career paths of not only teachers, but also teacher educators and researchers. The book is part of the Oxford Studies in Comparative Education Series, edited by David Phillips and draws on the lives of teachers in many countries including Brazil, Greece, Iceland, Bahrain, Australia, Chile, China, Greece, the Czech Republic, The United States, Thailand and New Zealand. The editors have excellent credentials for the task of bringing together these accounts: Penny Haworth has led research projects in a range of language teaching settings and her more recent research into the career trajectories of language teachers is an extension of earlier studies into teacher beliefs and change processes in classrooms where there are students from diverse linguistic and cultural backgrounds; Cheryl Craig Is Professor and Coordinator of Teaching and Teacher Education at Houston, and in 2015 she was recipient of the Michael Huberman Award for her research contributions to understanding the lives of teachers.

The edited volume challenges assumptions about the linear development of career paths, and the ways we have to date enquired into the professional lives of English language teachers. It also raises new questions about the complex circumstances and contingencies – institutional, socio-political, interpersonal – that shape teachers' career trajectories, together with the discontinuities and criss-crossing lines of professional development and practice. It does this by encasing the contributions in two broad sections: the first focusing on stories of career paths, while the second is devoted to the socio-political contexts of teaching and teacher education. Throughout, the voices of contributors – whether as teachers, researchers, authors, research participants, lifelong learners or teacher educators – ring through and make compelling reading. In the Foreword, Yvonne and David Freeman describe their teaching journeys as rivers of

life or life histories drawing on time, space, aspirations, conflicts, chance, student needs, culture, circumstance, methodologies, self-study and shifts in the profession to narrate their stories.

The editors identify a number of emergent themes: world travelling, the influence of socio-political contexts, liminal spaces, self-reflection and the importance of critical friends; they also identify teachers' images of self as curriculum makers, as the 'good' English language teacher, teachers' best-loved selves and a concern with social justice. For me in the book I also identified the influence of small moments on career paths, the value of Lemke's (2005) notion of traversals, and Bakhtin's relational construct of answerability as central to teacher agency.

I fully concur with Yvonne and David Freeman's conclusion that *The Career Trajectories of English Language Teachers* is a much-needed book that educates and inspires readers. For me it brought to the surface further questions about what Dick Allwright (2005) so aptly called the quality of classroom life and life within the ELT profession. I would strongly recommend the edited collection to teachers, teacher trainees, postgraduate students, researchers, and anyone who is interested in developing a career as an English Language Teacher. I applaud the editors and contributors for their work in bringing this volume together – it will continue to influence the way we understand the lives, practices and life courses of English language teachers and teacher educators.

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# Brown, H.D. & Lee, H. (2015). *Teaching by principles: An interactive approach to language pedagogy.* (4<sup>th</sup> ed.). White Plains NY: Pearson. ISBN 978-0-13-392585-2. 668 pp.

## Reviewed by Rosemary Wette, University of Auckland

The first edition of *Teaching by principles* appeared in 2001, and over the past 15 years it has become a popular and respected text in many foreign and second language (L2) teacher education programmes. A 4<sup>th</sup> edition of the book has recently appeared and, for the first time, includes the complementary perspective of a co-author, and Heekyeong Lee's areas of special interest (e.g. technology, pedagogical grammar and the concept of agency) are reflected in a number of the interesting additions to the latest edition. The aims of this review are therefore to introduce the book to any new

readers not yet acquainted with it, but also to inform readers who currently use the previous (3<sup>rd</sup>) edition about changes and additions in the latest edition of the book.

Brown provides a brief summary of the main changes to the book's content and format in his preface (pp. xiii - xvi). These include new content in the form of new chapters, teaching tips, suggested classroom applications, and a glossary. Other changes are that some chapter content has been reallocated or deleted, and the reference list has been updated to include research and scholarly works published since 2007. At nearly 700 pages (more than 100 pages have been added), this book is now an even more comprehensive and detailed guide to developing core skills and knowledge in L2 teaching and learning. Part I provides an historical overview of approaches and methods (Chapter 2), as well as chapters on communicative approaches, teaching principles, and learner agency (Chapters 3-5). Part II includes chapters on teaching across age levels (Chapter 6), proficiency levels (Chapter 7), and cultural and sociopolitical contexts (Chapter 8). Aspects of classroom teaching such as course and lesson planning, teaching materials, use of technology, classroom interaction and management can be found in the six chapters (Chapters 9-14) of Part III. The topic of Part IV is teaching the four macro-skills, grammar, and vocabulary (Chapters 15-19), and this is followed by discussion of assessment in Part V (Chapters 20-21) and lifelong professional learning for teachers in the final section of the book (Part VI).

Since many readers will be familiar with Brown's general approach, and the wealth of relevant information that this book provides on each topic, I have selected just a few noteworthy innovations in the new edition on which to comment. The first is a completely new chapter on *Agency in language learning* that draws on literature on learner motivation and self-efficacy, situated cognition, identity, and emotion, and how these concepts relate to learner agency - both in general and in specific sociopolitical contexts. The final part of the chapter offers a number of practical suggestions for how the principle of learner agency can be advanced in the second-language classroom.

Other chapters have undergone major revisions. The chapter on *Cultural and socio-political contexts* now provides a more nuanced discussion of the connections between language and culture, and the concepts of intercultural competence and "code-meshing", as well as updated information about English as a global language and lingua franca, native- and non-native speakers of English as teachers, and English teaching in a range of policy contexts. The chapter on *Technology in language teaching and learning* has been brought up to date through the inclusion of information on Mobile-Assisted Language Learning (MALL), the TESOL Technology Standards (Healey et al, 2011), and use of Web 2.0 tools such as Facebook and Twitter, as well as the opportunities for cross-cultural learning that these technologies facilitate. The chapter on *Form-focused instruction* (in previous editions) is now called *Teaching grammar and vocabulary*, and has a broader focus (Chapter 19). Chapter

content includes an outline of the topic of grammar, different approaches to form-focused instruction, written corrective feedback, and grammar teaching techniques, and a section on vocabulary teaching strategies.

Of the many innovations, I found the *Classroom connections* boxes (practical suggestions for classroom tasks) and the new or improved Figures and Tables very useful in the teacher education courses that I take. However, this is not the only group of learners for whom this book would provide valuable information, since it is sufficiently broad in coverage and well-referenced to appeal to more advanced learners, who could use it to provide an introduction to more or less all the main areas of professional interest for teachers. I am happy to recommend this book, and especially the 4<sup>th</sup> edition, as an invaluable resource for any language teacher education programme.

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East, M. (2016). Assessing foreign language students' spoken proficiency: Stakeholder perspectives on assessment innovation. Singapore: Springer. ISBN 978-981-10-0301-1. 227 pp.

# Reviewed by Karen Ashton, Massey University

Being able to use a language to communicate verbally is the primary goal of many language learners. However, accomplishing this within a secondary school context, where there has traditionally been a heavy emphasis on high-stakes assessment, is a significant challenge. The new *Interact* standard, which replaced the *Converse* standard in New Zealand's National Certificate of Educational Achievement, represents a radical change in practice for language teachers. This change forms the focus of Martin East's book, which is the first of its kind to address an assessment reform in New Zealand. The book, which is part of Springer's *Educational Linguistics* series, seeks to respond to the following questions: *What are teachers and students making of the innovation? What is working, what is not working, what could work better? What are the implications, both for classroom practice and assessment?* Using Bachman and Palmer's (1996) Test Usefulness Framework as a theoretical framework, East presents teacher survey and interview data from a two year research project (2012 - 2013) that investigated the comparative usefulness and fitness for purpose of *Interact* and *Converse*. Students were also surveyed on their views, although direct

comparisons are complicated in that each cohort took only one of the standards (i.e. *Interact* or *Converse*).

The first two chapters of the book provide a theoretical orientation for the research, affirming the importance of stakeholder perspectives in building an evidence-based validity argument, while also outlining some of the key debates in the assessment of spoken language proficiency, e.g., static or dynamic, task-based or construct-based, and single or paired/grouping. The presentation of these issues as dichotomies is, as the author acknowledges, perhaps simplistic, but East has synthesised the tensions clearly, and in a way that is accessible and engaging for both academic and non-academic readers. Chapter three provides an excellent historical overview of the assessment reform. As East himself was closely involved in the process, readers are able to benefit from his insider perspective, and his ability to provide a "warts and all" account of its challenges and tensions. Although the chapter is designed as an introduction to the study, it is also likely to become an important separate resource.

Findings are presented thematically in chapters five, six and seven, and it is these chapters, together with the concluding chapters eight and nine, which are likely to be of most interest and relevance to practicing language teachers. While there is some sense of repetition in these chapters, data are used carefully and systematically to build up the narrative. A real strength is in the way East presents teacher and student views clearly and respectfully, allowing the data to speak for itself, while acknowledging differing perspectives. Findings reveal that, overall, the majority of teachers consider *Interact* to be a more valid and reliable assessment than *Converse*. Of particular note are comments which highlight that *Interact* tasks are more authentic, and that students have opportunities to speak to each other with a degree of spontaneity and naturalness for a real communicative purpose. (This is just what we want!)

Comments from some teachers also show how the *Interact* standard has led to better assessment for learning conditions, with positive washback into the classroom. The findings are not all positive, though. It was notable that *Interact* was seen as logistically more onerous than *Converse*. The discussion also highlights real issues in expecting spontaneous interaction when a) students want to be prepared and perform as well as possible, and b) NZQA requires that students receive advanced written notification of assessment. This leads to one of the key contributions of the book: a detailed exploration of the different understandings of what counts as spontaneous speech. Another key contribution centres on the importance of the task, both in design and relevance of topic, in ensuring that meaningful student interaction is elicited. The book concludes with well-considered recommendations for on-going classroom practice, which seek to further bridge the gap between assessment and learning.

This book is an essential and important resource not only for those in New Zealand with an interest in the *Interact* standard, but also for anyone interested more broadly in the assessment of spoken language proficiency.

#### Reference

Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice: designing and developing useful language tests*. Oxford, England: Oxford University Press.

# Kress, G., Jewitt, C., Ogborn, J., Charalampos, T. (2014). *Multimodal teaching and learning: The rhetorics of the science classroom.* London: Bloomsbury. ISBN 978-082-64-4806. 190pp.

## Reviewed by Mhairi Mackay, WINTEC

This is the first in a series of investigations into multimodal teaching and learning, and is part of the Bloomsbury *Classics in Linguistics* series. Language teachers may find the secondary science class focus unfamiliar, but these investigations into the multimodal conception of communication and its resonances with how learning happens offer rich material for reflection.

The Introduction provides an overview of the main content of the book. Themes that are explored in the first four chapters include the meaning of multimodality and a multimodal approach, action in the science classroom, and shapes of knowledge. The final three chapters examine the process of rethinking learning in a multimodal environment, written genres and the transformation of multimodal communication, and materiality as an expression of learning. Sarangi and Candlin's Foreword emphasises the "considerable relevance for widening the scope of applied linguistics" (pp xiv-xv) of this inquiry, and supports the authors' view that this approach to understanding language from a different perspective reveals a great deal. The semiotic underpinnings of the multimodal approach are fundamentally informed by M.A.K. Halliday's work (for example Halliday, 1978). The research reported in this book investigates the ways in which learning happens in observed science classes through the lens of awareness of the complexity of what goes on in learning environments (Gunter Kress, one of the book's authors, is Professor of both Semiotics and Education). Taking a multimodal approach, the researchers find learning to be a dynamic process of transformative sign making, with different modes constantly interacting to afford different learners different opportunities to make sense of what they are learning.

In lay terms, the multiple modes of communication include image, diagram, the kinaesthetic, language (speech and text), association of the usually non-visible with

accessible examples (e.g. the heart considered as a pump), and action with models. The book emphasises that all modes should be regarded as equally valid, rather than the more common approach that highlights language as the major mode, with other modes as extra-linguistic auxiliaries. The book explores specific learning environments, and the affordances of different modes and their interactions that are offered. For example, using speech to introduce a concept sets up a relationship with time (i.e., the idea is introduced, and then perhaps expanded on) that is different in the affordances it allows to the introductions of a concept visually, with spatial simultaneity (i.e., all elements can be viewed - and potentially understood - simultaneously).

In science, the investigators observed teachers and learners negotiating new learning through dynamic processes that actively involved both learners and teachers. Analysis of videoed classroom environments through rhetorical frames informed by mode allowed the researchers to focus on how different aspects of any meaning-making can use interacting modes. Gesture, for example, if combined with visual representation, could be used to communicate aspects of the heart and its functions in ways that afforded meaning-making and were not reliant on the spoken or written word.

This analysis leads to further discussion of the impact on pedagogy, teacher training, curriculum design and assessment. The study was aimed more at understanding the complexity of teaching and learning in the observed classrooms, and did not attempt to evaluate the effectiveness of the observed work. Further research avenues suggested by the authors include multiple observations of different teachers teaching the same elements of the curriculum, or of using the same approaches to teach different elements of the curriculum. The question of what is best taught/learnt by which mode or combination of modes is therefore left unanswered. However, several aspects of the observed multimodal elements in teaching and learning science are considered for reflection by practitioners.

A main emphasis in this book is the materiality of the modes, and human physical response to this materiality. One general suggestion is that interpersonal aspects of information and content could be communicated "particularly with gesture, intonation, or the use of the body in space" (p.207). This point is a useful reminder to teachers of the need to remember that teaching and learning happens within human bodies, which need to be actively engaged in order to open up learning opportunities in any environment.

A brief consideration is given to assessment (pp.208-9) and its relationship to how learning was observed to happen. This area is described as "a vast problem" (p.209) in the light of the multimodal teaching and learning that the study observed, and therefore "assessment needs to be seen and rethought in the context of multimodality" (p.209). This study is certainly an interesting contribution to the field, and one that has

provoked reflection and discussion among the language teachers I work with. Perhaps, as O'Halloran and Lim (2011) claim:

...appreciating the functional affordances and constraints of these semiotic resources and modalities as well as how they are co-deployed in the orchestration of the lesson can provide understandings which may lead to more effective teaching and learning in the classroom.

#### References

- Halliday, M.A.K. (1978). Language as social semiotic: The social interpretation of language and meaning. London, England: Edward Arnold.
- O'Halloran, K. L. & Lim, F. V. (2011). *Dimensioner af multimodal literacy*. Viden om læsning. Number 10, September 2011, pp. 14-21. Copenhagen, Denmark: Nationalt Videncenter for Laesning. Available online at: <a href="http://www.videnomlaesning.dk/wp-content/uploads/Kay-OHalloran-Victor-Lim-Fei-FINAL.pdf">http://www.videnomlaesning.dk/wp-content/uploads/Kay-OHalloran-Victor-Lim-Fei-FINAL.pdf</a>

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