Languages seen are languages used

The linguistic landscapes of early childhood centres

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'Linguistic landscapes' is the term used to describe all the visible language in signs and displays seen in particular areas such as a local street and, more recently, educational spaces (Gorter, 2017; Landry & Bourhis, 1997).

Linguistic landscapes are of significance in educational spaces because not only are they visual representations of how educators support and value multilingual children's use of their languages, they can also influence how languages are perceived and used (Cenoz & Gorter, 2006). As tamariki and their whānau move around their early childhood centres (ECC), they draw conclusions about the relative importance of the languages in the signs around them because the linguistic landscape indicates what is socially supported within that context (Dressler, 2015). This also happens in online world: another linguistic landscape.

Young children's emerging bilingualism is challenging in countries dominated by English (Cunningham, 2011). Thus the presence of signs in more than one language, as well as cultural artefacts in ECCs, prompt and support the use of multiple languages thus enabling children and adults to engage and build multilingual language and social skills (Harris, 2017).

The National Science Challenge

2016 and again in 2017, as a part of my PhD research and work as an assistant researcher in a National Science Challenge project, I visited seven ECCs to build on my Master's research on the linguistic landscape of an awardwinning Māori immersion ECC (Harris, 2017).

A Better Start, E Tipu e Rea, National Science Challenge has over 120 researchers from across disciplines and organisations aimed at giving our young children a better start in the areas of resilience, healthy weight and successful literacy and learning (see https://www.abetterstart.nz/).

Our research in this nationwide programme explores the language environments of young emergent bilinguals growing up in a digital world. Successful literacy and learning occur across all environments (physical and digital) of young tamariki and are inclusive of all their languages. We documented linguistic landscapes from two immersion ECCs, six mainstream ECCs, five primary school Y0/1 classrooms and the community library.

The aim of our research is to support the richness of these landscapes for tamariki who are growing up with more than one language (emergent bilinguals) through feeding back to our centres and developing a website - Emergent Bilinguals in a Digital World. Its purpose to support emergent bilinguals with digital world strategies, workshops, resources and a blog (see https://ebdwwebsite.wixsite.com/ebdw).

A more far reaching aim of our research is to develop policy guidance at a national and international level as bilingualism brings lifelong benefits that are particularly valuable to priority learners and their whānau (Bates, 2016). New Zealand is of international interest as support of multilingualism is embedded within our exemplary Te Whāriki curriculum.

The method of research was simple: two videos were taken around the walls of each centre (one from the perspective of a child and one from the perspective of an adult). Photos were taken of all the displays, with and without visible language. To capture the digital world, screenshots were taken of ECC online environments accessible to the public. Then, in most cases, we interviewed the Head kaiako, two kaiako and where possible two whānau members. The interviews were very conversational but aimed to explore language and digital technology practices that supported emergent bilingual young children in each centre.

This was repeated one year later in 2017 in a return visit. Each centre was then given a report on their linguistic landscape for review and correction. Each report included the number of languages displayed in their centre and online with selected examples of their displays that supported their emergent bilinguals.

Findings

Our research findings showed that the languages seen on the walls of the centre and online were the languages used and welcomed within the centres. For the two immersion centres, one Māori and one Samoan, it was clear that the language visible on the walls reflected their language policy of being an immersion centre.

Figure 1 shows that 24 out of 34 photos of items that were collected from the linguistic landscape of the Māori immersion environment contained only or mostly te reo

Māori. Further coding of these images revealed that of those with te reo Māori, 19 items had been produced by centre. This indicated that the richness of the linguistic landscape was created and driven by the kaiako. The English-only signs were produced by external agencies, such as an independent business or a Government organisation, thus reflecting the external dominance of an English-speaking society in which the centre is situated.

In the Samoan immersion centre the number of displays in English-only had reduced in 2017 (Figure 2) and the number of displays with Samoan had increased (Figure 3). The linguistic landscape was rich in cultural artefacts with Samoan language being heard extensively within the centre and the researcher being greeted with 'Talofa'.

Both immersion centres followed the Te Whāriki curriculum, which is inclusive of the commitment of the recognition of Māori language. For the six mainstream centres, this commitment was reflected in their linguistic landscapes with a large proportion of displays containing te reo Māori. In the return visit in 2017, the number of displays in English-only had decreased (Figure 4), while the number in te reo Māori had considerably increased (Figure 5). The number of multilingual displays had also increased (Figure 4).

Over the year of our research, the linguistic landscapes of these young emergent bilingual children in the mainstream centres had become richer in te reo Māori and less dominated by English. Figures 4 and 5 show that English apparently lost a lot of its privileged position. Figure 4 suggests that Samoan had also lost out somewhat and become one of the "other languages" that have come into the space occupied by Samoan alone in 2016.

Although ours was not an intervention study, the research process gave an opportunity for kaiako and whānau to reflect on their environments to see how their language practices were visible to their tamariki and their whānau. All centres had linguistic landscapes that reflected their bicultural commitment and practices as set out in Te Whāriki. The use of te reo Māori was integrated throughout day with the use of karakia, commands, vocabulary, haka, myths and more. Centres with linguistic landscapes rich in te reo Māori greeted the researcher with 'Kia ora'. Central to practices to support linguistically diverse young children in all centres was the development of relationships with whānau and community.

As relationships with tamariki and whānau are central, the purpose of the linguistic landscape for all centres was to engage whānau and express respect and support for diverse languages and cultures. The majority of centres expressed some difficulties engaging whānau, particularly with adults whose culture was not common in this location. No formal language policies relating to diverse language speakers were in place in the six mainstream centres but language practices, such as the use of greetings in children's home languages in their learning stories, were emerging as informal policies.

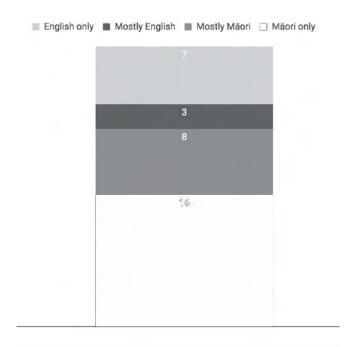


Figure 1: Languages of displays in the Māori immersion centre in 2016

The majority of centres recorded children's ethnicities but no centre had language assessments or records of children's linguistic repertoires. All teachers interviewed were motivated to develop their practices with linguistically diverse children, including personal language study, creating linguistically diverse displays, participating in professional development, and strengthening connections with community networks. Two of the six mainstream centres employed bilingual teachers, South Asian and Samoan. The bilingual teachers would often use the home languages with children and one bilingual teacher found this particularly useful for calming children's emotional responses.

All centres viewed diverse languages and cultures as a resource and in 2017, centres had a stronger message of support to whānau to continue to speak home languages with their tamariki. Use of languages other than English and English and te reo Māori was limited to greetings that were used in profile books, ePortfolios, whiteboards, newsletters, Facebook and ECC websites. Cultural celebrations and national Language Weeks were celebrated in some centres, indicating that the wider society impacted and supported the language practices in ECC.

One centre greeted tamariki and whānau in the language being celebrated in that week, essentially normalising the use of the additional languages. The majority of centres sought support from whānau for diverse language use within the centre, with a number of centres co-constructing displays to support home language use within the centre (e.g. Figure 6). Barriers limiting diverse language use were concerns expressed by kaiako about being tokenistic, pronouncing language incorrectly and using language in the wrong context.

Technology was used by the majority of centres to

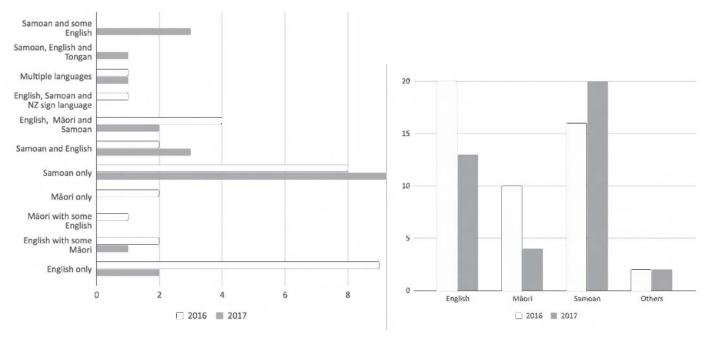


Figure 2: The languages of displays in the Samoan immersion centre in 2016 and 2017

strengthen the connection and engagement with whānau through email, texting, centre websites, Facebook, electronic newsletters and ePortfolios. Barriers to whānau engaging through digital media included limited connectivity and consequent reduced capability to share and collaborate. This raised concerns about digital equity. Common issues were lack of devices and limited access to internet services in the home, the cost of data and the purposeful management of technology within the home, such as restricting computer use until after the child's bedtime which reduced opportunities for whānau to share the ePortfolio with the child.

Before our interviews raised the question, all centres were unaware of children's digital experiences in the home. Some teachers raised concerns about the potential overuse of digital technology and distraction from the conversations necessary for language development. Digital devices were purposefully managed in centres as they viewed the technology as a tool, such as assisting in connecting to the cultural resources available online. Barriers to kaiako accessing multilingual and cultural resources were mostly considered to be the time taken to research them and uncertainty about whether language found online was accurate and appropriate.

During the interviews, most teachers and whānau expressed a need for guidance in the use of the digital world to support emergent bilingual children. Our research team continues to research this area and to support teachers through our website, however at this stage there is very limited research on young children, digital technology and multilingual language practices. It is clear there is a need for more research in this area.

Enhancing linguistic landscapes

Our engagement with our research participants included exploring how displays and language practices could be

Figure 3: Number of displays where each language is visible in the Samoan immersion centre in 2016 and 2017

enhanced through the use of digital technologies. Two examples were the use of QR codes and Story Book Creator. In both examples kaiako were directed to the instructional videos on our website to support their use of digital technologies in their language practices with emergent bilinguals. Access to those instructional videos, including step-by-step guides, on how to make a QR code and how to use a Story Book Creator are below the next two headings.

QR Codes

https://ebdwwebsite.wixsite.com/ebdw/qrcodes

In the Māori immersion centre, it was possible homes had limited spoken te reo Māori and language was emerging and needed support and encouragement from the centre (King & Cunningham, 2017). The kaiako understood the challenges whānau faced within the home and strategically developed resources which included te reo Māori, such as a karakia, used regularly within the centre, along with a digital photo of the tamariki to be shared with the home. With the image along with language it was much more likely to become a part of the linguistic landscape of the child's home:

Really just helping them [the children] pronounce the words properly. That was the reo strategy. So we thought about the whānau and we thought about the child. We thought it would be a good resource to have visible for them, like in the kitchen where they do karakia, three karakia for our day. And then having the child's photo on there, they're not going to throw it away. That was kind of the incentive for our whānau to jump on board, which they loved. Then we had a parent come in and say that "This is the one that we've been practising". You can actually see on the whāriki and the tables who is actually saying it now, compared to where

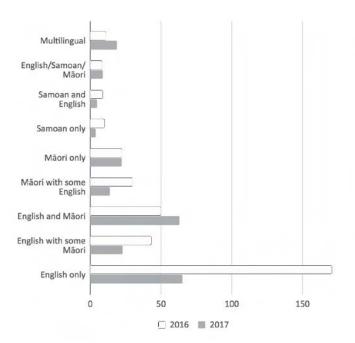


Figure 4: The languages of displays in six mainstream ECCs in 2016 and 2017

they were before, you can hear.

(Māori immersion teacher interview, 2016).

Figure 7 is an example of how to enhance the resource with a QR code linked to a YouTube video of the karakia for future practices. This strategy of using QR codes was extended to support the Samoan centre to co-construct a resource with our research team that they could share with aiga and other ECC (Figure 8).

Story Book Creator

https://ebdwwebsite.wixsite.com/ebdw/storycreator

One mainstream ECC with strong relationships with whānau was exploring the use of digital Story Book Creator. The Story Book Creator software allows users to upload digital photos and add text and audio to multiple pages. In a workshop with kaiako, together we explored the use of the Story Book Creator along with our 'How to' video from our website.

This was an extension of their continuing practice of asking whānau to add home languages to learning stories with digital photos sent through the ePortfolio and/or displayed in children's physical profile books. With the Story Book Creator, the ECC could audio record home languages to the digital photos to create a resource in the child's first language. As one teacher told us:

I'm wanting to use Story Book Creator with some of our migrant families. I've only just started with a [linguistically] competent child, so I created an eBook and recorded her voice. The next thing I really want to do for my appraisal is to record the whānau voice or the child's voice in their heritage language. [This extends what we do now which is to talk about [the

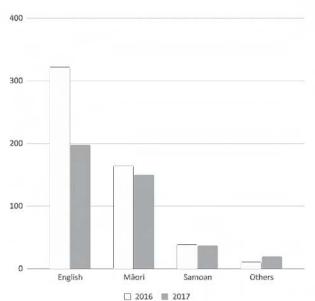


Figure 5: Number of displays where each language is visible in the six mainstream ECCs in 2016 and 2017

child's painting up on the wall and/or in the [child's profile] book to make it more visible with words in their heritage language.

(Mainstream ECC teacher interview, 2017).

The use of software such as the Story Book Creator and QR codes enhanced the linguistic landscapes of the young children by extending language and literacy across their home and centre environments. Willis (2012) provides ePortolio illustrations developed with children who have exceptional rights that are also exemplary. These can provide additional avenues to enable multilingual whānau to collaborate with teachers to create resources for their child's multilingual language and literacy development.

Conclusion and next steps

Drawing attention to linguistic landscapes in educational settings, both physical and digital, facilitates language awareness which can support the needs of the individuals as well as groups, leading to enriched language environments. Linguistic landscapes go beyond what is seen to incorporate text, images, objects and people encountered over time and space. These connections between environments and the people who inhabit them support the relationships and language development of emergent bilinguals and their whānau. An important way in which educators can value and support multilingual children's use of their languages is to include their languages and related cultural artefacts in their linguistic landscapes.

Thus, the linguistic landscape reflects the strength of the (formal and informal) language policy and influences how languages are perceived, and therefore used. The digital landscapes we observed were designed to strategically support the ECC physical landscape and to extend it into homes and communities without raising concerns over too much screen time. Our research paper submitted to an educational technology journal provides more details (Harris, Davis, Cunningham & De Vocht, Under Review).

The success of our research has been based on engagement and collaboration with our participants. It is through this engagement that language practices with emergent bilingual children have been made more visible. A blogpost in our website provides an invitation for readers and instructions on upload images. We hope that sharing images, ideas and language resources with one another will serve to enhance the linguistic landscapes (physical and digital) of ECC in Aotearoa New Zealand in a way that more accurately reflects our bilingual and multilingual tamariki, whānau and community.

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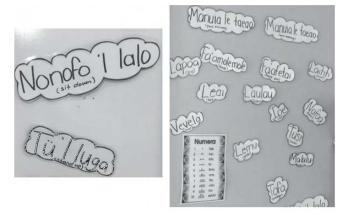


Figure 6: A display in Samoan co-constructed with whānau to support the use of Samoan within the ECC



Figure 7: An example of a co-constructed display in te reo Māori enhanced with a QR code linking to a YouTube video



Figure 8: An example of a co-constructed display from the Samoan immersion centre including a QR code linking to audio of the fanau singing the song in Samoan in 2017.