Words on walls: The linguistic landscape of Kirikiriroa primary school classrooms

Jessie Burnette[1], Andreea Calude1 & Hēmi Whaanga[2]

1 University of Waikato
[2] University of Massey



Loanwords in Aotearoa

The term ‘lexical borrowing’ is used to ‘describe the process of the transfer of lexical material from one language (the donor, source or model language) to another language (the receptor or replica language)’ (Zenner & Kristiansen 2014, p. 1)

New Zealand English is special, as we see a ‘flow of words from an endangered, minority-status language […] into a dominant, global *lingua franca*’ (Trye et al. 2020, p. 2).

Linguistic Landscapes

'The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combines to form the linguistic landscape of a given territory, region or urban agglomeration.'
(Landry and Bourhis, 1997, p. 25)

The 'state-funded school, a central civic institution,' 'represents a deliberate and planned environment where pupils are subjected to powerful messages about language(s) from local and national authorities' (Brown 2012, p. 282; see also Krompak et al. 2022 for an overview of LLs and education).



RNZ (2022). *'They'll have no bloody idea' - bilingual signs on the West Coast.* https://www.rnz.co.nz/news/ldr/475482/they-ll-have-no-bloody-idea-bilingual-signs-on-the-west-coast

Research Questions

RQ1

Which te reo Māori (loan)words are children regularly exposed to through schoolscapes in Kirikiriroa English-medium primary schools?

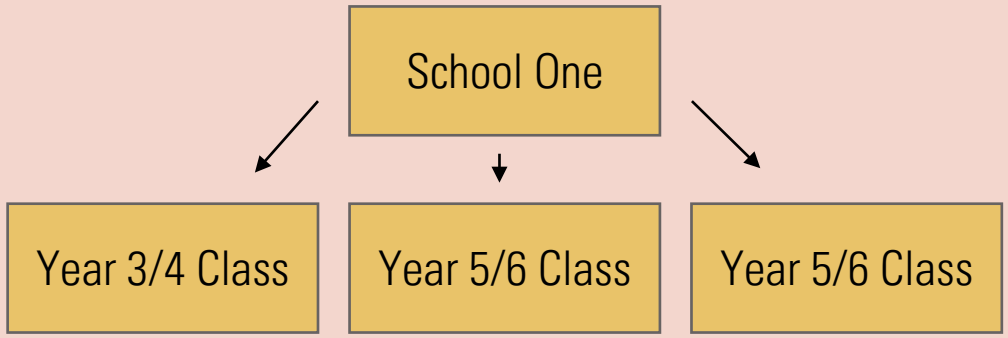
RQ2

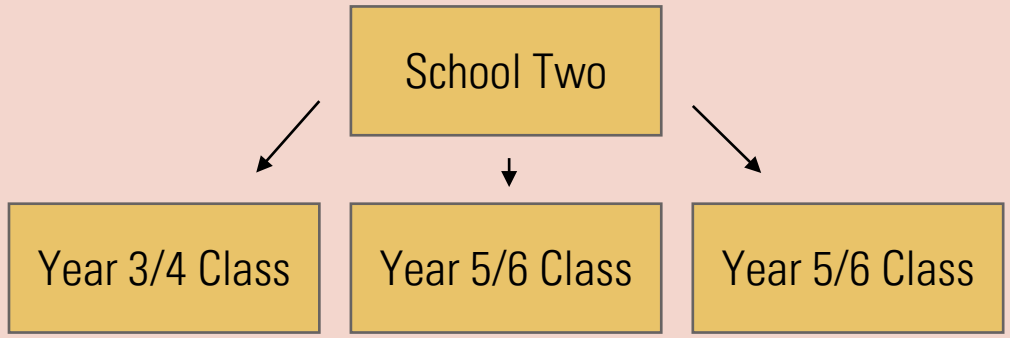
What is their distribution across schools / classrooms / years?

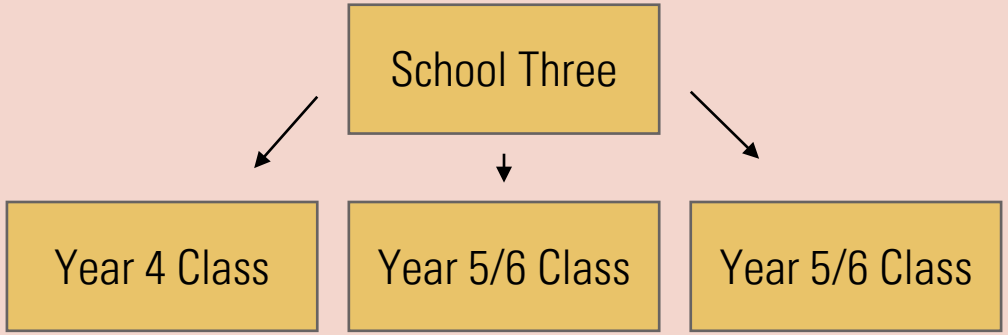
RQ3

What indirect language ideologies does the presentation of te reo Māori (loan)words within these classrooms suggest?

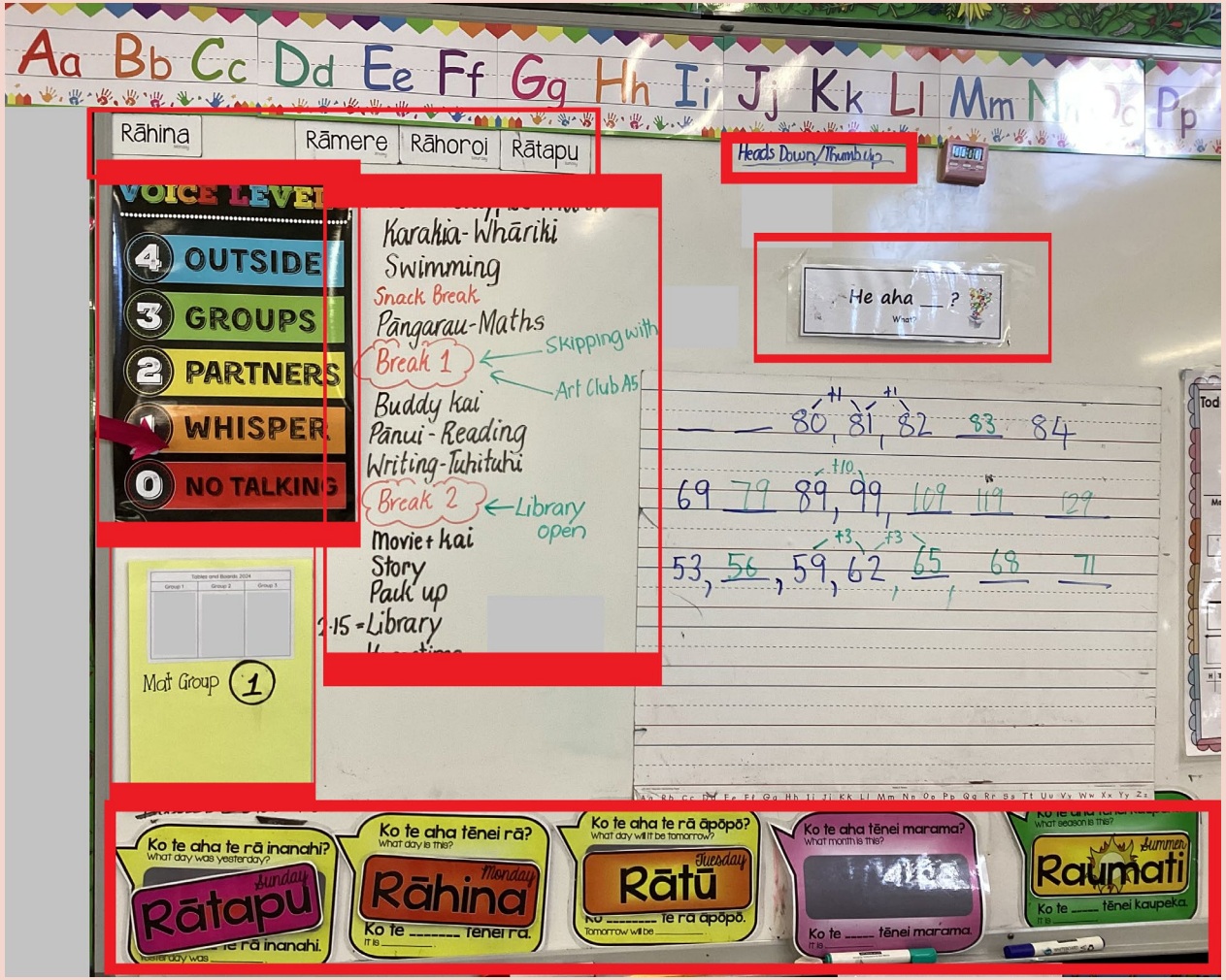
The Schools (Data & Method)







Artefacts & Clusters



RQ1: Loanword Exposure

Word	Word Type	Frequency of occurrence
Māori	c) People noun c) Social culture noun, abstract (Māori language) c) Social culture noun, activity/practice (Māori school subject)	47
kiwi[5]	a) Environment noun, fauna (bird/fruit) b) People noun (New Zealander)	15
waka	Material culture noun (canoe)	11
karakia	Social culture noun, activity/practice	7
kōwhai	b) Environment, flora (tree) b) Adjective, colour (yellow)	7
tūī	Environment noun, fauna (bird)	7
moa	Environment noun, fauna (bird)	6
rātā	Environment noun, flora (tree)	6
pāngarau	Social culture noun, activity/practice (mathematics)	5
kākāriki	b) Environment noun, fauna (bird) b) Adjective, colour (green)	5

Figure 1. Ten most frequent te reo Māori loans

RQ1: Word type & semantic category

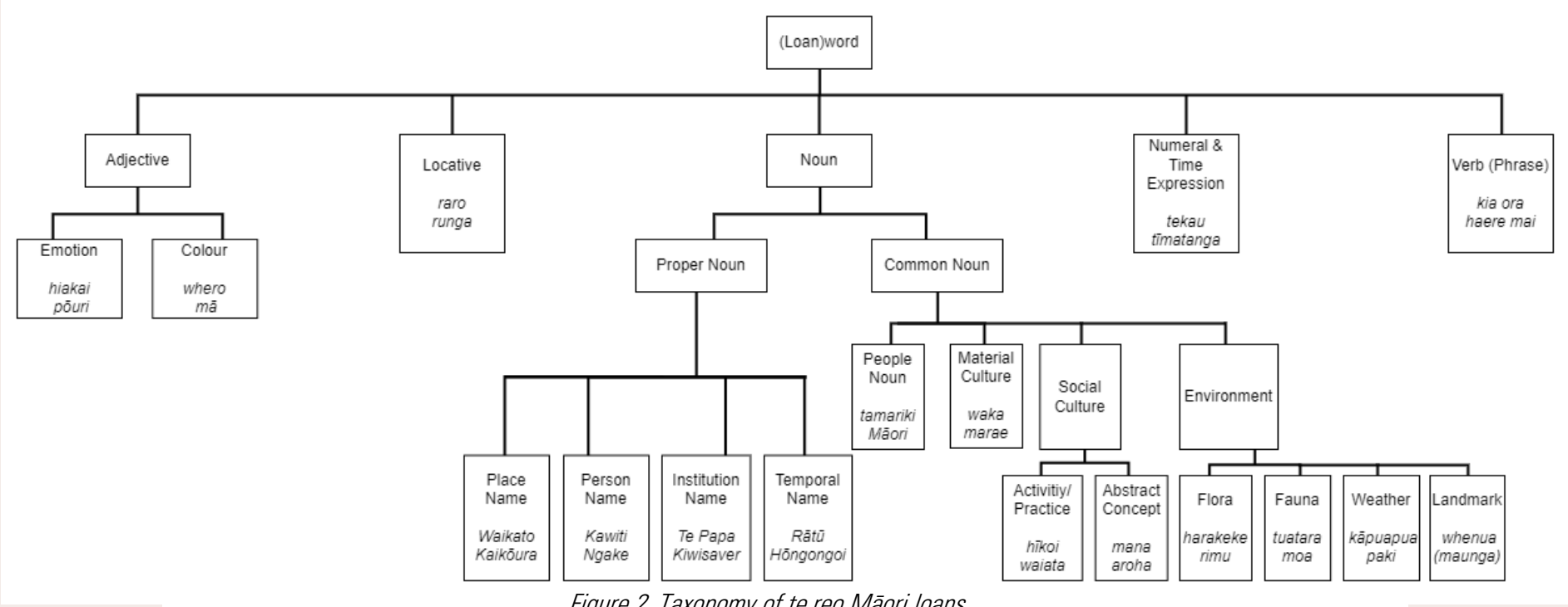


Figure 2. Taxonomy of te reo Māori loans

Adjective		Locative	Noun		Numeral & Time Expression	Verb (phrase)
Emotion	Types: 41 Loans: 53	Types: 4	*Common*	Types: 155 Loans: 317	Types: 16	Types: 19
Colour	Types: 12 Loans: 25	Loans: 4	*Proper*	Types: 105 Loans: 168	Loans: 25	Loans: 23

Proper Noun	
Place Name	Types: 58 Loans: 82
Person Name	Types: 21 Loans: 22
Institution Name	Types: 4 Loans: 6
Temporal Name	Types: 24 Loans: 58

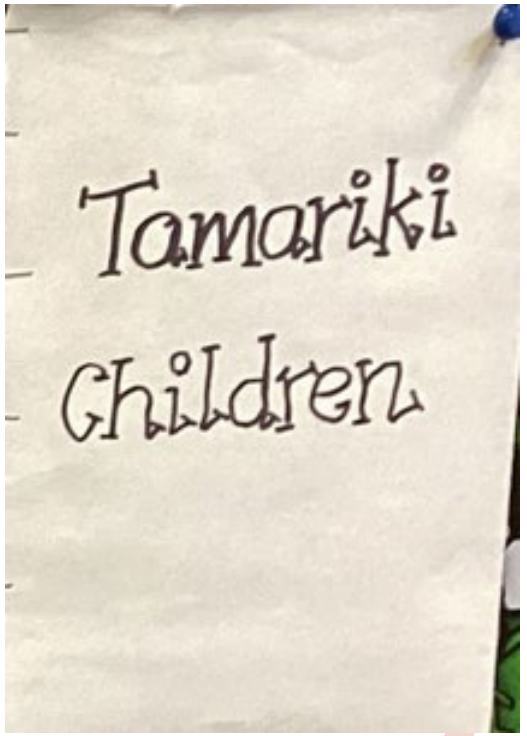
Common Noun	
People Noun	Types: 16 Loans: 63
Material Culture Noun	Types: 14 Loans: 29
Social Culture Noun	Types: 32 Loans: 69
Environment Noun	Types: 95 Loans: 156

Figure 3. Distribution of te reo Māori loans

RQ2: (General) te reo Māori Exposure

	School 1				School 2				School 3			
	Class A Year 4	Class B Year 5/6	Class C Year 5/6	Total	Class D Year 3/4	Class E Year 5/6	Class F Year 5/6	Total	Class G Year 3/4	Class H Year 5/6	Class I Year 5/6	Total
Images	18	11	22	51	13	13	30	56	22	31	9	62
Clusters	32	23	20	75	27	16	45	88	27	42	24	93
Tokens	358	1160	621	2139	645	286	4000	4931	805	3690	331	4826
Theme (dp = daily planning, env = environment, m = maths)												
dp = 110			dp/env = 4			env = 76			m = 66			

Figure 4. Overview of images, clusters and text analysed from the nine classrooms



RQ2: (General) Māori Exposure

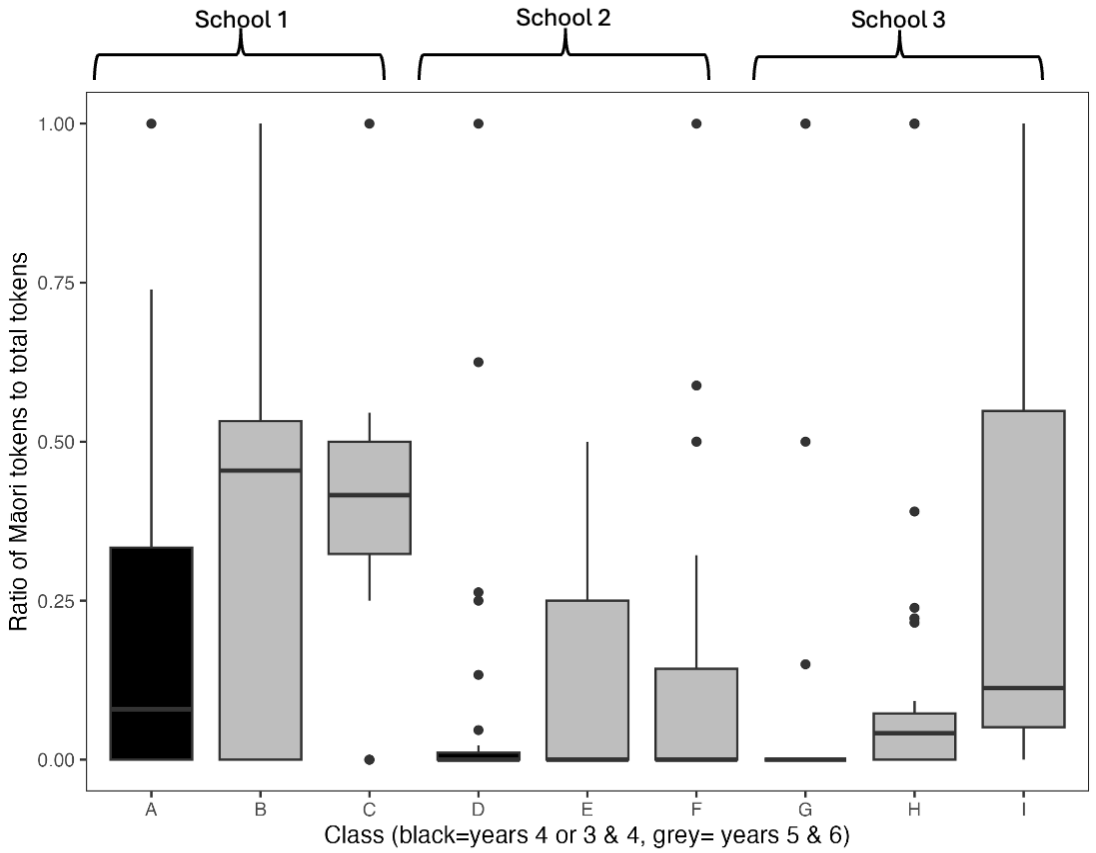


Figure 5. Comparison of Māori tokens normalised across individual classes (n=9)

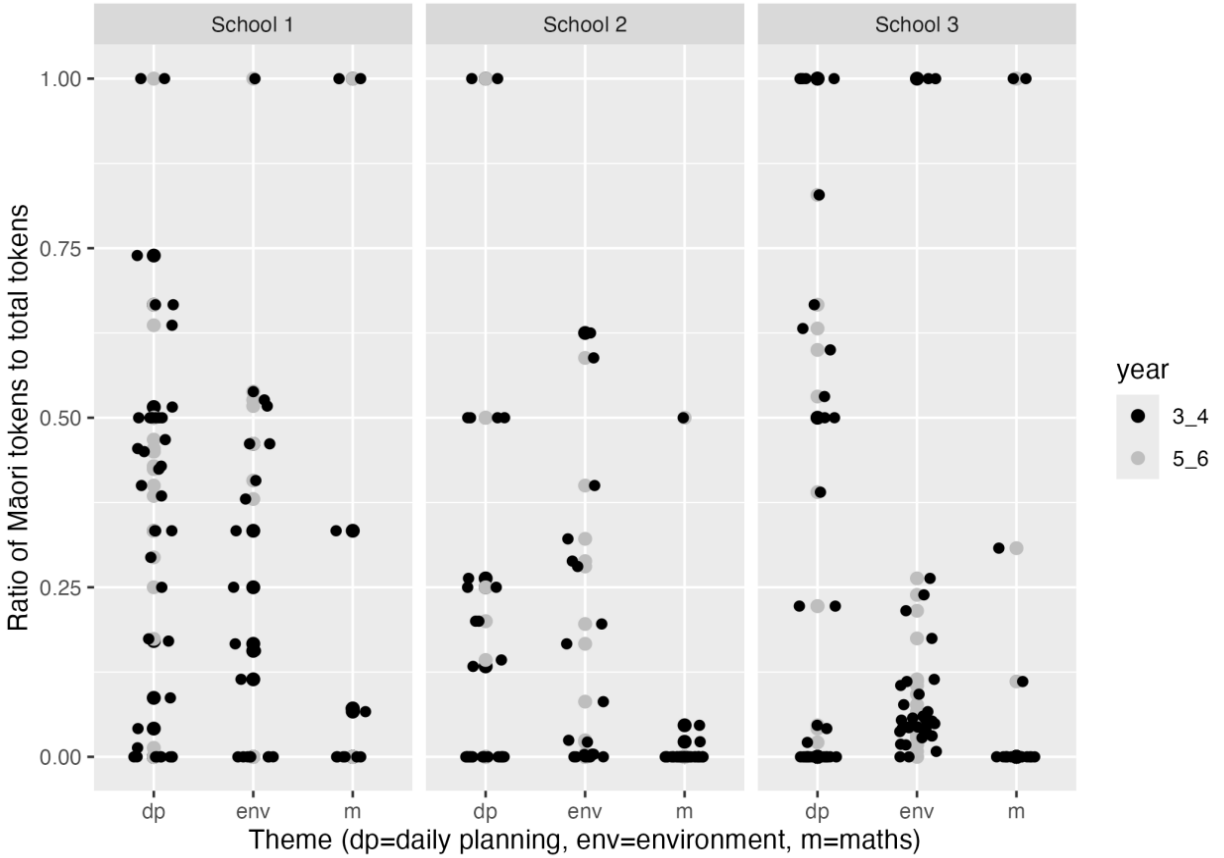
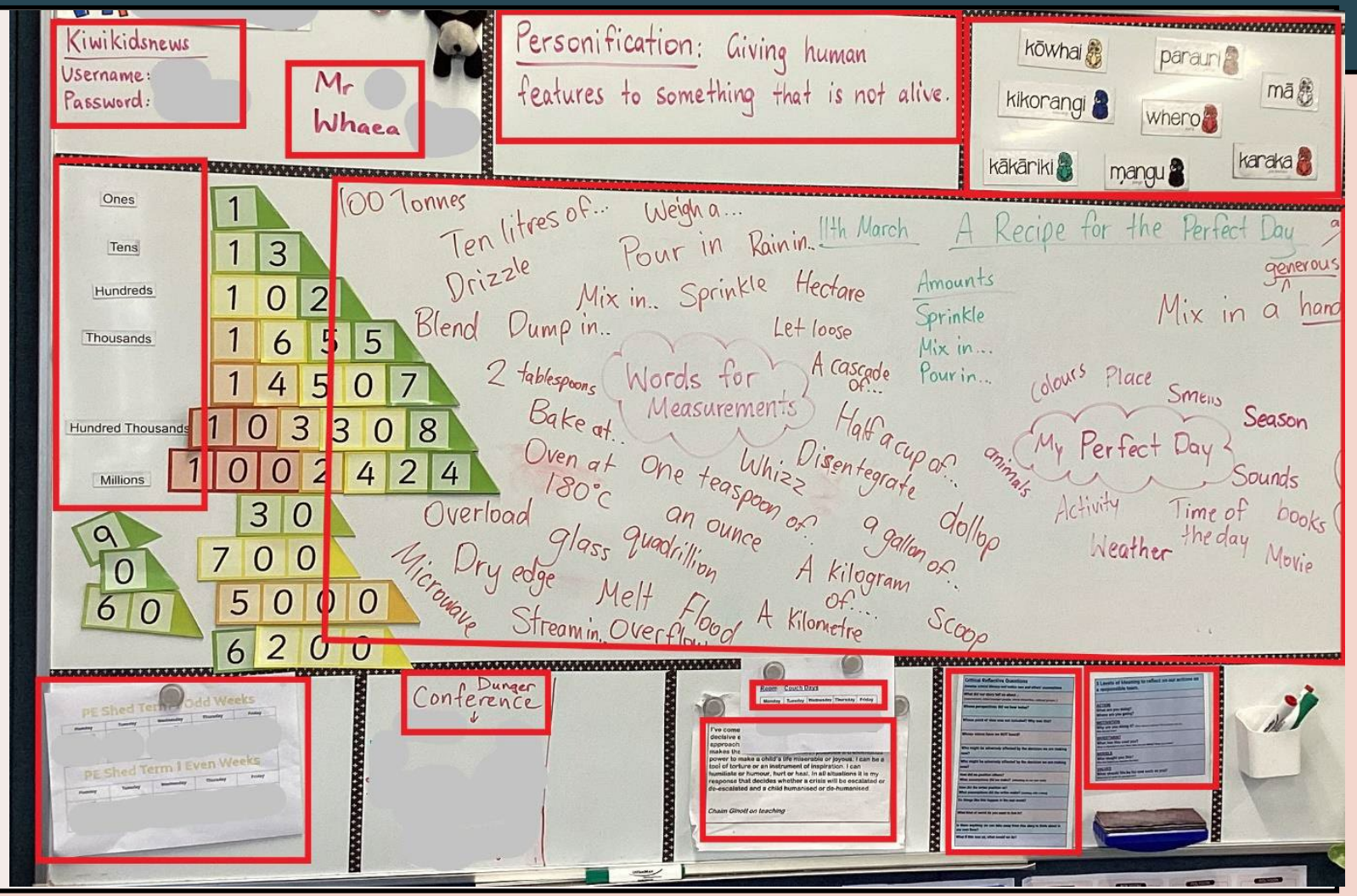


Figure 6. Overview of Māori tokens normalised by school, year and theme (n=252, we excluded the four clusters relating to both daily planning and the environment)

But what does it mean?



If New Zealand is to achieve an educational landscape resonating with te reo, **it is necessary for training institutions to support teachers' development as access providers of the language**, and for schools and policy makers to be supported wholly and realistically, understanding the needs of each school and the multifaceted identities of the teachers within them.

Barr and Seals (2018), p. 12.

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References

Academic

Barbu, S., Nardy, A., Chevrot, J., & Juhel, J. (2013). Language evaluation and use during early childhood: Adhesion to social norms or integration of environmental regularities?. *Linguistics, 51*(2), 381-412. https://dx.doi.org/10.1515/ling-2013-0015

Barr, S., & Seals, C. A. (2018). He Reo for Our Future: Te Reo Māori and Teacher Identities, Attitudes, and Micro-Policies in Mainstream New Zealand Schools. *Journal of Language, Identity & Education, 17*(6), 434-447. https://doi.org/10.1080/15348458.2018.1505517

Brown, K. (2012). The linguistic landscape of educational spaces: Language revitalization and schools in southeastern Estonia. In D. Gorter, H. Marten & L. Van Mensel (Eds.), *Minority Languages in the Linguistic Landscape* (1st ed. pp. 281-298). Palgrave Macmillan.

Calude, A., Stevenson, L., Whaanga, H., & Keegan, T. T. (2020). The use of Māori words in National Science Challenge online discourse. *Journal of the Royal Society of New Zealand*, *50*(4), 491-508. https://doi.org/10.1080/03036758.2019.1662818

Gorter, D., Marten, H. F., & Mensel, L. V. (2012). *Minority Languages in the Linguistic Landscape*. Palgrave Macmillan.

Greensill, H., Manuirirangi, H., & Whaanga, H. (2017). Māori language resources and Māori initiatives for teaching and learning te reo Māori. In H. Whaanga, T. T. A. G. Keegan, & M. Apperley (Eds.), *He Whare Hangarau Māori - Language, culture & technology* (pp. 1–9). Te Pua Wānanga ki te Ao / Faculty of Māori and Indigenous Studies, the University of Waikato. https://hdl.handle.net/10289/11734

Johnson, D. (2021). *Linguistic Landscaping and the Pacific Region: Colonization, Indigenous Identities, and Critical Discourse Theory*. Lexington Books.

Landry, R., & Bourhis, R. (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology, 16*(1), 23–49.

Macalister, J. (2006a). The Maori presence in the New Zealand English lexicon, 1850-2000: Evidence from a corpus-based study. *English World-Wide, 27*(1), 1-24. https://doi.org/10.1075/eww.27.1.02mac

Macalister, J. (2008). Tracking Changes in Familiarity with Borrowings from Te Reo Maori. *Te Reo, 51*, 75-97.

Macalister, J. (2021). Emerging voices or linguistic silence?: Examining a New Zealand linguistic landscape. *Multilingua, 29*, 55-75. https://doi.org/10.1515/mult.2010.003

Matika, C. M., Manuela, S., Houkamau, C. A., & Sibley, C. G. (2019). Support for teaching te reo Māori in Primary Schools. *Mai Journal, 8*(2), 172-187. https://doi.org/10.20507/MAIJournal.2019.8.2.6

Matras, Y. (2009). *Language Contact*. Cambridge University Press.

Ministry of Education. (12 January 2024). 'Tau Mai Te Reo | The Māori Language in Education Strategy (English)'. https://www.education.govt.nz/our-work/overall-strategies-and-policies/tau-mai-te-reo/tau-mai-te-reo-the-maori-language-in-education-strategy-english/

Murphy, H., Reid, D., Patrick, A., Gray, A., & Bradnam, L. (2019). Whakanuia te reo kia ora: Evaluation of te reo Māori in English-medium compulsory education. *Te Taura Whiri i te Reo Māori*. https://thehub.swa.govt.nz/assets/Uploads/Whakanuia-te-Reo.pdf

New Zealand Government. (nd). Te Reo Māori in English-medium schools. https://tereomaori.tki.org.nz/Curriculum-guidelines/Teaching-and-learning-te-reo-Maori/Aspects-of-planning/The-concept-of-a-tuakana-teina-relationship

Pierre, T. S., Jaffan, J., Chambers, C. G., & Johnson, E. K. (2024). The Icing on the Cake. Or Is it Frosting? The Influence of Group Membership on Children's Lexical Choices. *Cognitive Science, 48*, 1-17. https://doi.org/10.1111/cogs.13410

Shohamy, E., & Waksman, S. (2008). Linguistics Landscape as an Ecological Arena: Modalities, Meanings, Negotiations, Education. In E. Shohamy & D. Gorter (Eds.), *Linguistic Landscape: Expanding the Scenery* (pp. 313-331). Routledge.

Stewart, G. (2014). Te reo Māori in classrooms: Current policy, future practice. He Whakaaro Ano. https://www.nzcer.org.nz/system/files/journals/set/downloads/set2014_3_003.pdf [Accessed 23 March 2023]

Szabó, T. P. (2015). The management of diversity in schoolscapes: An analysis of Hungarian practices. *Apples: Journal of Applied Language Studies, 9*(1), pp. 23–51. https://doi.org/10.17011/apples/2015090102

Trye, D. Calude, A., Bravo-Marquez, F., & Keegan, T. T. (2020). Hybrid Hashtags: #YouKnowYoureAKiwiWhen Your Tweet Contains Māori and English. *Frontiers in Artificial Intelligence, 3*(15), 1-19. https://doi.org/10.3389/frai.2020.00015

Walker, R. (2004). *Ka Whawhai Tonu Matou Struggle Without End*. Penguin Books.

Zenner, E., Rosseel, L., & Speelman, D. (2021). Starman or Sterrenman: An acquisitional perspective on the social meaning of English in Flanders. *International Journal of Bilingualism, 25*(3), 568-591. https://doi.org/10.1177/1367006920960816

Media

RNZ (2020). *Government wants all education providers to use te reo Māori every day*. https://www.rnz.co.nz/news/national/430513/government-wants-all-education-providers-to-use-te-reo-maori-every-day

RNZ (2022). *'They'll have no bloody idea' - bilingual signs on the West Coast*. https://www.rnz.co.nz/news/ldr/475482/they-ll-have-no-bloody-idea-bilingual-signs-on-the-west-coast