

Information about Samoan speech

1. A comparison between Samoan and English phonology

Aspect	Language	Number	Details	Source
Consonants	Samoan	13 initial consonants	Formal register: /p, t, k, ʔ, m, n, ŋ, f, v, s, h, l, ɹ/ Colloquial register: /p, k, ʔ, m, ŋ, f, v, s, h, l/	Ballard & Farao (2008)
	English	24 initial consonants	/p, b, t, d, k, g, m, n, ŋ, θ, ð, f, v, s, z, ʃ, ʒ, h, tʃ, dʒ, j, w, ɹ, l/	Smit (2004)
Consonant clusters	Samoan	0 consonant clusters		Ballard & Farao (2008)
	English	Approx. 29 syllable-initial and many syllable-final consonant clusters	Many 2 and 3 element consonant clusters in initial position including /pl, bl, kl, gl, fl, sl, pɹ, bɹ, tɹ, dɹ, kɹ, gɹ, θɹ, fɹ, ʃɹ, pj, tj, fj, mj, nj, sm, sn, sp, st, sk, spl, spɹ, stɹ, skw/ and many 2 to 4 element consonant clusters in final position	McLeod (2007) Smit (2004)
Vowels and diphthongs	Samoan	10 vowels + 20 diphthongs	Vowels: /i, i:, e, e:, u, u:, o, o:, a, a:/ Diphthongs: /ie, iu, io, ia, ei, eu, eo, ea, uo, ua, ue, ui, oa, oi, oe, ou, ai, ae, au, ao/	Ballard & Farao (2008)
	English (US-General American)	14 vowels + 3 diphthongs	Vowels: /i, ɪ, e, ε, æ, ə, ɜ, ɝ, u, ʊ, o, ʌ, ɔ, ɑ/ Diphthongs: /aɪ, aʊ, ɔɪ/ (Smit also lists 5 'r'-colored diphthongs)	Smit (2007)
	English (Canadian)	14 vowels + 3 diphthongs	Vowels: /i, ɪ, e, ε, æ, ə, ɜ, ɝ, ʌ, ʊ, o, ʌ, ɔ, ɑ/ Diphthongs: /aɪ, ʌʊ, ɔɪ/	Bernhardt, & Deby (2007)
	English (UK-Received Pronunciation)	12 vowels + 8 diphthongs	Vowels: /i, ɪ, e, ε, æ, a, ə, ɜ, u, ʊ, ʌ, ɔ, ɒ/ Diphthongs: /aɪ, aʊ, ɔɪ, eɪ, ou, ɪə, εə, ʊə/	Howard (2007)
	English (Australian)	12 vowels + 8 diphthongs	Vowels: /i:, ɪ, e, æ, ɛ:, ɐ, ɔ:, ʊ, ɜ:, ɝ:/ ⁱ OR /i, ɪ, e, æ, a, ʌ, ɒ, ɔ, ʊ, u, ɜ, ə/ ⁱⁱ Diphthongs: /æɪ, ae, əɜ, əɔ, ɔɪ, ɪə, eɪ, ʊə/ ⁱ OR /eɪ, aɪ, ou, aʊ, ɔɪ, ɪə, εə, ʊə/ ⁱⁱ	ⁱ Harrington, Cox, & Evans, (1997) ⁱⁱ Mitchell (1946)
	English (New Zealand)	12 vowels + 8 diphthongs	Vowels: /i, ɪ, e, æ, ə, ɜ, u, ʊ, ʌ, ɔ, ɒ, ɑ/ ⁱ OR /i, ɪ, e, æ, a, ə, ɜ, ʊ, ʌ, ɔ, ɒ/ ⁱⁱ Diphthongs: /aɪ, aʊ, ɔɪ, eɪ, ou, ɪə, eə, ʊə/ ⁱ OR /aɪ, aʊ, ɔɪ, eɪ, ou, ɪə, eə, ʊə/ ⁱⁱ	ⁱ Bauer & Warren (2004) ⁱⁱ Maclagan (2009)
Tones	Samoan	0 tones		
	English	0 tones	-	
Syllable shape	Samoan	CV, V		Ballard & Farao (2008)

	English	C ₍₀₋₃₎ VC ₍₀₋₄₎	The smallest syllable is V and the largest is CCCVCCCC <i>strengths</i> .	Smit (2004) McLeod (2007)
Stress-timed or syllable-timed?	Samoan	Predictable stress	Stress falls on a long vowel or vowel cluster. Compound words have stress on the second word.	Ballard & Farao (2008)
	English	Stress-timed	Syllables can be strong or weak. Stress also is used for emphasis.	
Varieties	Samoan			
	English	Many dialects	Many dialects including General American English, Received Pronunciation (England), Scottish English, Irish English, Australian English, New Zealand English, South African English etc.	
Writing system	Samoan	Latin alphabet		
	English	Latin alphabet	Roman script loosely related to phonetic realizations of the consonants and vowels.	

References

Samoan studies

Ballard, E., & Farao, S. (2008). The phonological skills of Samoan speaking 4-year-olds. *International Journal of Speech-Language Pathology*, 10(6), 379-391.

English studies

Bauer, L., & Warren, P. (2004). New Zealand English: Phonology. In E. Schneider, K. Burridge, B. Kortmann, R. Mesthrie & C. Upton (Eds.). *A handbook of varieties of English: Vol. 1. Phonology* (pp. 580-602). Berlin, Germany: Mouton de Gruyter.

Bernhardt, B. M. H., & Deby, J. (2007). Canadian English speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 177-187). Clifton Park, NY: Thomson Delmar Learning.

Harrington, J., Cox, F., & Evans, Z. (1997). An acoustic phonetic study of broad, general, and cultivated Australian English vowels. *Australian Journal of Linguistics*, 17, 155-184.

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Maclagan, M. (2009). Reflecting connections with the local language: New Zealand English. *International Journal of Speech-Language Pathology*, 11(2), 113-121.

McLeod, S. (2007). Australian English speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 241-256). Clifton Park, NY: Thomson Delmar Learning.

Mitchell, A. G. (1946). *The pronunciation of English in Australia*. Sydney, Australia: Angus & Robertson.

Smit, A. B. (2004). *Articulation and phonology: Resource guide for school-age children and adults*. Clifton Park, NY: Thomson Delmar Learning.

Smit, A. B. (2007). General American English speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 128-147). Clifton Park, NY: Thomson Delmar Learning.

2. Samoan speech assessments

For Samoan speech assessments see: www.csu.edu.au/research/multilingual-speech/speech-assessments

3. Monolingual speech acquisition (summaries and studies written in English)

None known.

4. Multilingual speech acquisition (summaries and studies written in English)

General summaries

Goldstein, B. A., & McLeod, S. (2012). Typical and atypical multilingual speech acquisition. In S. McLeod & B. A. Goldstein (Eds.), *Multilingual aspects of speech sound disorders in children* (pp. 84-100). Bristol, UK: Multilingual Matters.

Grech, H., & McLeod, S. (2012). Multilingual speech and language development and disorders. In D. Battle (Ed.), *Communication disorders in multicultural and international populations* (4th ed., pp. 120-147). St Louis, MO: Elsevier.

Zhu Hua & Dodd, B. (Eds). (2006). *Phonological development and disorders in children: A multilingual perspective*. Cleavdon, UK: Multilingual Matters.

Yavaş, M. (2007). Multilingual speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 96-100). Clifton Park, NY: Thomson Delmar Learning.

Summaries of multilingual Samoan speech acquisition

None known.

Studies of multilingual Samoan speech acquisition

Languages	Country	Study	Age of children	Total number of children (no. of multilingual children)**	Typically/ atypically developing children	Speech /language	Production/ perception
Samoan-English	New Zealand	Ballard, E., & Farao, S. (2008). The phonological skills of Samoan speaking 4-year-olds. <i>International Journal of Speech-Language Pathology</i> , 10(6), 379-391.	4;0 – 4;11	20 (20)	typical	speech	production
	Australia	Hemsley, G., Holm, A., & Dodd, B. (2006). Diverse but not different: The lexical skills of two primary age bilingual groups in comparison to monolingual peers. <i>International Journal of Bilingualism</i> , 10(4), 453-476.	Mean = 11;2	101 (62) (28 = Samoan-English)	typical	language	production perception
	Australia	Hemsley, G., Holm, A., & Dodd, B. (2010). Patterns in diversity: Lexical learning in Samoan-English bilingual children. <i>International Journal of Speech-Language Pathology</i> , 12(4), 362-374.	4- to 5-years	18 (9)	typical	language	production perception

Note. * Studies of typically and atypically developing multilingual children published in English were included; however, studies that only included monolingual children were excluded.

**The total number of children may have included both multilingual and monolingual children, so the number in brackets provides the total number of multilingual children.