



Multilingual Children's Speech Development



WELSH

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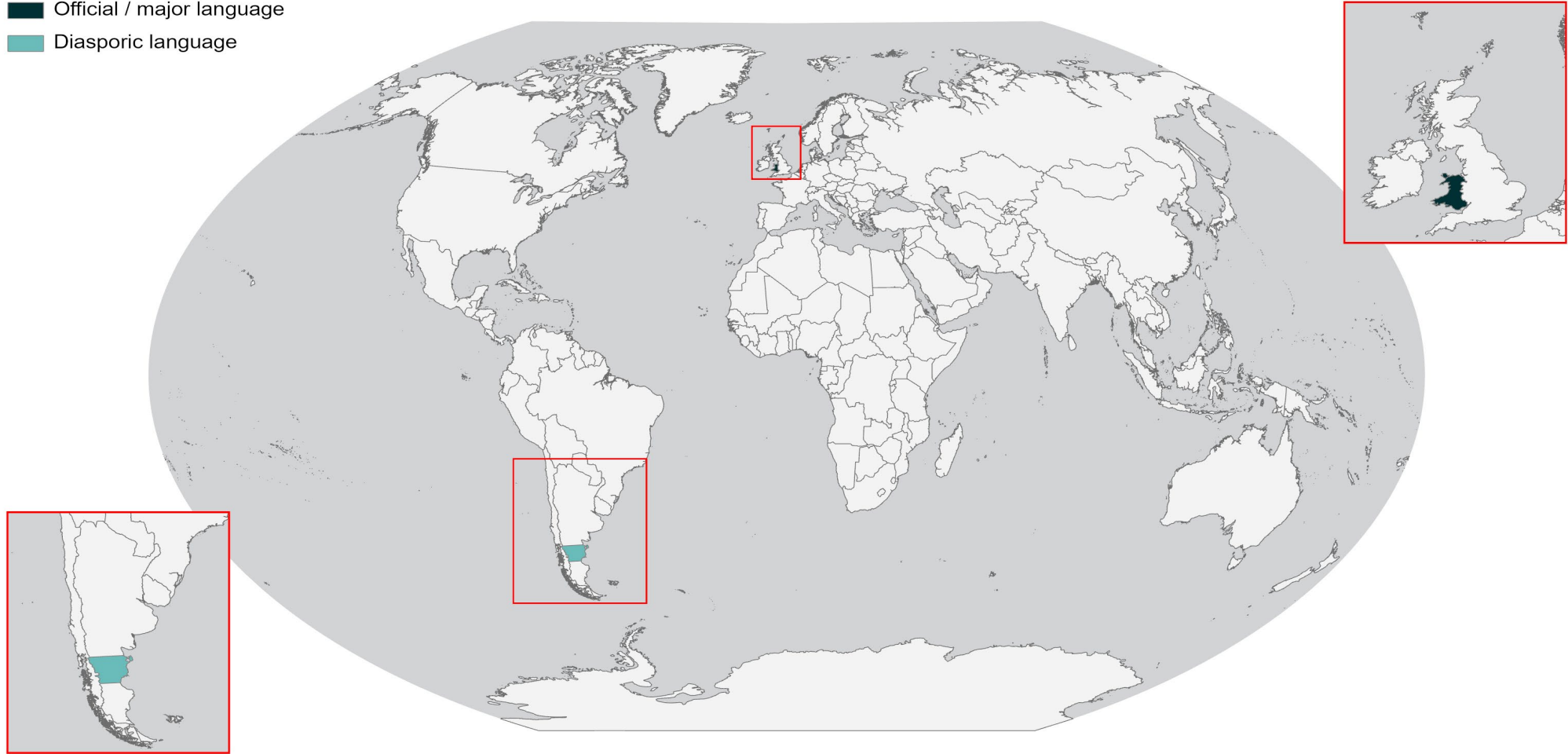


Welsh

- **Commonly spoken in**
 - Wales, UK
 - Chubut Province, Argentina
- **Dialects and variants**
 - Northern Welsh; Southern Welsh; and various other regional varieties
 - Patagonian Welsh
- **Writing**
 - Left to right. Latin alphabet (Roman script) with 29 letters including 8 diagraphs; use of a few diacritics, in particular the circumflex
 - Transparent orthography with close grapheme-phoneme correspondence and only few exceptions

Welsh Map

- Official / major language
- Diasporic language



The authors acknowledge assistance provided by the Spatial Data Analysis Network (SPAN) at Charles Sturt University, and in particular Craig Poynter, for his work creating this map. Figures/maps/imagery created using ESRI ArcGIS Pro 3.1 software and data contained within ESRI's Living Atlas.

Welsh (Northern Welsh) Speech Components

- **Consonants (25):** /p b t̪ d̪ k g m n̪ ŋ r̥ r f v θ ð s ʃ χ h ɨ w j l tʃ dʒ/
- **Consonant clusters (many):**
 - Two-element and three-element clusters in word-initial, word-medial and word-final positions
- **Vowels (13+13):** /i: ɪ e: ε a a: u: ʊ o: ɔ i: ɛ ə/ and /aɪ ɔɪ eɪ ɪʊ εʊ aʊ ɔʊ ɪʊ aɛ oɛ ɔɛ ʊɛ eɪ/
- **Tones (0):** None
- **Phonotactic restrictions:** $C_{(0-3)}V_{(1)}C_{(0-3)}$
 - Welsh allows various syllable types, including CV, VCV, VC, CCV, VCCV, VCC, CCCV, VCCCV
- **Prosody:** Welsh word stress is fixed on the penultimate syllable; major pitch movements tend to take place on the final syllable of accented words

Welsh

Age of Acquisition

- **Consonants (Welsh-dominant children, Munro et al., 2005)**
 - Before 3;6 / p b t d k g m n l w j f v s χ h/
 - By 3;6 /ð ʃ tʃ dʒ/
 - By 4;6 /ŋ θ ʔ/
 - Not by 5;0 /r rʰ/
- **Consonant clusters (Mayr et al., 2014, 2015)**
 - Word initial: Late acquisition of clusters containing /r/ and 3-element onsets
 - Word-final: None of the clusters containing /r/ are acquired by 5;0, and greater variability than for word-initial clusters, suggesting more protracted development
- **Vowels**
 - Limited information
- **Tones**
 - Not applicable

Welsh Speech Development

■ Percentage correct

- Munro et al. (2005) report percent consonant correct data for each consonant for Welsh-dominant and English-dominant children between 2;6 and 5;0
- 98% of word-initial consonant clusters correct by Welsh-dominant children by 6;0 and 96% by English-dominant children (Mayr et al., 2014)
- 74% of word-final consonant clusters correct by Welsh-dominant children by 5;0 and 60% by English-dominant children (Mayr et al., 2015)

■ Intelligibility

- Limited information but a Welsh translation of the ICS is available

■ Common phonological patterns

- Weak syllable deletion, final consonant deletion, gliding, voicing, reduplication, assimilation and initial consonant omission evident in children below 3;0 (Lewis, 2021; Munro, 1985; Vihman, 2015)
- Consonant clusters: reductions and simplifications predominate with some vowel and consonant insertions, metathesis and deletion (Mayr et al., 2014, 2015)

*ICS, Intelligibility in Context Scale (McLeod et al., 2012)

Welsh Children with Speech Sound Disorders

■ Also called

- Anhwylder synau lleferydd → speech sound disorder
- Anhwylder ffonolegol → phonological disorder
- Dyspracsia llefrydd datblygiadol → developmental verbal dyspraxia

■ Research has focused on

- A small number of cases studies of children with atypical speech development (Ball et al., 2006; Lewis, 2021)

■ Studies

- A systematic account of early phonetic and phonological development for a boy aged between 1;0 and 2;6 residing in Gwynedd, North Wales being exposed to both Welsh and English at home (Lewis, 2021)
- Description of a boy aged 8;9 with inconsistent word production and motor planning difficulties who is being exposed to Welsh and English at home (Ball et al, 2006)
- Description of a boy aged 5;8 with a limited phonetic inventory and reduced contrastivity who is being exposed to Welsh at home and is attending Welsh-medium education (Ball et al, 2006)

Welsh Speech Assessments

- **Dyfed Test**
 - Donohue, A., Holding, J., & Jones, V. (1983). *Dyfed screening test of articulation and language*. Swansea: East Dyfed Health Authority.
- **Cwlwm**
 - Rees, O., & Trythall, M. (1995). *CWLWM*. Edinburgh: Langlearn Communications.
- There are no standardized assessments available

Welsh Speech Interventions

- Approaches for speech intervention for Welsh-speaking children are based on those originating in English
- Therapists select from a range of approaches, such as meta-phonological, discrimination, and articulatory placement therapies, depending on the needs of each child, with materials being adapted into Welsh, as required

Reference

Book chapter

- Mayr, R., Lewis, R., Wren, Y. (2025). Welsh speech development. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

Presentation

- Mayr, R., Lewis, R., Wren, Y. (2024). *Welsh: Multilingual children's speech development*. Charles Sturt University, Australia.
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- Sharynne McLeod and Helen L. Blake, Charles Sturt University, Australia