

Link to Recorded Bilingual Activity. - [ECEY4010 - 2508338.mp4](#)

AI Statement

I acknowledge the use of Copilot and Google editor in line with the guidance given by UWTSD for Module ECEY4010 between 02/03/2026 & 29/03/2026.

I used the prompt(s):

1. Check my work for grammatical errors and spelling- Use UK format and do not make any changes to the structure of my sentences.
2. Put my Harvard references into alphabetical order.
3. Please find me credible sources about the variety of different spoken languages EAL in the Welsh valleys.
4. Can you source this – ‘Some children speak a language other than English or Welsh as their first language, either because they were born in a different country or because their parents speak a different language at home.’
5. Can you find me academic sources discussing brain development and language.
6. Can you summarise this for me - Neuroscience and language acquisition and learning: a systematic literature review.

I confirm that I have not presented any AI generated text as my own work.

I confirm I have retained copies of my drafts, notes, and other resources I used before, and after the use of AI tools which I may be asked to provide in evidence

Introduction

This paper adopts Grosjean's (2012) definition of bilingualism as a person's ability to use two languages and multilingualism as the use of two or more languages, although the skill shown in these languages may not be equal.

Bilingualism and multilingualism are increasingly recognised as significant assets within early years in Wales offering measurable cognitive, social, and cultural benefits (Welsh Government, 2022). The growing linguistic diversity across Wales means that many children enter EY settings speaking more than one language or beginning to acquire English or Welsh as an additional language whilst attending the setting (Literacy trust, 2022).

This paper draws on current research to explore bilingualism and its benefit to brain development and divergent thinking, the frameworks that support Bilingualism in Wales and the impact and implications of national curricula and policy for practice.

Benefits of Bilingualism and Multilingualism

In Wales, supporting children to grow up with more than one language has been recognised as important for the past century. Since the first Welsh-medium primary school opened in 1939, EY education has increasingly recognised that bilingualism is not just a language skill, it is a valuable part of children's development and identity (Education Wales, 2019).

Research undertaken by Bialystok & Martin (2004) shows that children who grow up with more than one language gain several cognitive benefits. Bilingual children regularly choose which language to use and which to temporarily 'switch off,' and this strengthens key brain processes. As a result, the research suggested that bilingual children often develop stronger self-control, better focus and attention, increased problem-solving skills, improved memory, and greater mental flexibility. Skills that support children not just in language learning, but across all areas of learning and play (Dewaele & Botes, 2020).

These advantages of bilingualism go beyond thinking skills. Bilingual children often show higher levels of empathy, cultural awareness, and social confidence because they move between different linguistic and cultural settings every day. This helps them understand

others, build relationships, and feel comfortable in diverse environments (Neuro, 2025, Rees Edwards, 2025)

While most research strongly supports bilingualism as a positive influence on children's development, it is important to acknowledge that there are differing views. Studies, such as those by Paap & Greenberg (2013), found no measurable bilingual advantage in certain executive function tasks, and even suggested disadvantages. These perspectives remind us that children's development is complex and influenced by factors including environment, exposure, and individual differences.

EAL / WAL

Recent findings from Language Trends Wales (2025) highlights the growing linguistic diversity across Welsh schools including those in the Valleys, noting that Wales aims to be an internationally minded, outward looking nation with a strong commitment to multilingualism.

The report identifies an increase in international language exposure in settings following the implementation of the Curriculum for Wales, with settings engaging more actively with global languages and cultures at an earlier stage (British Council Wales, 2025). However, the report also acknowledges disparity in provision, with settings still developing their capacity to support children who speak English or Welsh as an Additional Language. This diversity reinforces the importance of effective EAL and WAL support, as multilingualism contributes positively to children's confidence, cultural awareness, and broader engagement across the curriculum (British Council Wales, 2025).

However, Kersten and Winsler (2022) argue that although studies report potential benefits of bilingualism, the overall evidence remains inconsistent, with several large-scale investigations such as Nichols et al. (2020) finding no dependable cognitive or socio-emotional advantages.

Within EY settings across Wales the CFNMS (2024) supports EAL and WAL by requiring inclusive, developmentally appropriate provision for all learners, including those building new languages. It promotes bilingual communication in Welsh and English and encourages

valuing children's diverse cultural and linguistic identities within daily practice (Welsh Government, 2024).

These expectations ensure that children learning English or Welsh as an additional language are fully included in our EY provisions. Practitioners are encouraged to use bilingual communication and culturally responsive approaches that recognise and build upon each child's linguistic identity. Using consistent routines such as familiar greetings at arrival or repeated patterns during snack time, as shown in my recording helps children build a bank of predictable words and phrases, supporting their language acquisition and ongoing linguistic development (Carmarthenshire County Council, 2025).

Brain Development in Early Childhood

Sánchez Peña and Quesada Cubo (2025) argue that young children show high neuroplasticity, making the EY especially effective for acquiring additional languages as new neural pathways form rapidly. Bruner's (1966) work supports this, highlighting that children learn best through active engagement, social interaction, and meaningful linguistic experiences. His concept of scaffolding aligns with evidence that consistent routines, responsive conversations, and playful communication strengthen neural organisation. These enriched interactions provide the structured, yet supportive input needed to build strong foundations for bilingual or multilingual development.

This also aligns with the CFNMS five developmental pathways and Mudiad Meithrin's immersion-based pedagogy, both of which emphasise that young children learn languages most effectively when exposed to familiar, consistent, and emotionally secure environments (Welsh Government, 2022; Mudiad Meithrin, 2024).

Consistent multilingual routines in EY settings, such as those captured in my recorded session are especially impactful because the first thousand days are considered the peak period of brain growth, when up to 80% of neural foundations are established (Aguayo & Britto, 2024). By age three, children's brains contain a densely connected network of synapses, reflecting heightened neuroplasticity, with these connections strengthened or pruned according to the frequency and emotional significance of the experiences they encounter (Huttenlocher & Dabholkar, 1997, cited in Lumen Learning, 2026). Repeated language exposure within predictable routines helps reinforce synapses linked to

communication, social connection, and early vocabulary development, laying the groundwork for later bilingual or multilingual learning (Mazaheri Tehrani et al., 2024).

By this stage, the brain has reached around 80% of its adult size, and language centres are rapidly developing, meaning that warm, familiar experiences such as shared snack times or access to a language rich environment as shown in my recording directly support emotional security and efficient neural wiring for language acquisition (Centre on the Developing Child at Harvard University, 2014).

Divergent Thinking

Vaisarova and Carlson (2021) believe that divergent thinking involves producing a wide range of ideas in response to a single prompt. Rather than being identical to creativity, it is better described as one component that supports creative performance. It signals creative potential or represents a stage within the creative process. This view is supported by researchers such as Russ and Wallace (2015), who argue that divergent thinking is naturally strong in early childhood due to children's inherent imaginative and exploratory tendencies. Pretend play researchers such as McVay et al. (2025) likewise note that young children readily move beyond obvious ideas and generate multiple possibilities, demonstrating flexible, spontaneous thinking in the EY.

These ideas are evident in everyday EY practice. For example, in my session recording, children were consistently encouraged to take part in predictable, repetitive multilingual interactions, explore open-ended materials, and engage in repeated routines using familiar vocabulary across different languages. These emotionally secure and consistent experiences offer children opportunities to experiment with meaning, express ideas in varied ways, and think flexibly, conditions that support the development of divergent thinking (Russ & Wallace, 2015).

Although theorists often propose that divergent thinking supports bilingual development, experimental findings remain mixed. Booton et al. (2021), for instance, found no association between bilingualism and children's divergent thinking, indicating that these skills do not directly enhance bilingual ability, even though bilingual environments may still provide rich opportunities for exploration and flexible meaning-making.

Frameworks and Programmes

The Curriculum for Wales (2021) adopts a transformative approach to language learning by integrating Welsh, English, and International Languages within a single Area of Learning and Experience. All Welsh frameworks promote a multilingual mindset, encouraging schools and settings to help children make connections between languages and cultures while drawing on home, heritage, and community languages to foster belonging and inclusion. Research by Welsh Government (2017) suggests that this approach strengthens literacy, identity, and intercultural competence, aligning closely with the national ambition of Cymraeg 2050 to create a bilingual Wales by 2050.

The Welsh Language and Education Wales Act (2025) set clear national targets, including increasing the number of Welsh speakers to one million and expanding the use of Welsh across society. As part of this, the Act outlines requirements to increase Welsh-medium and bilingual provision, directly shaping expectations for EY practice. Building on this legislative direction, Welsh Government (2023) emphasises that early exposure to multiple languages is now a mandatory element of the curriculum, helping to cultivate global awareness and linguistic confidence by offering children opportunities to explore International Languages from the EY onward.

This commitment to bilingualism ensures that early childhood settings prioritise Welsh language development while valuing English and other home languages. However, the successful implementation of bilingual and international language learning remains dependent on practitioner confidence, workforce capacity, and access to high-quality resources, meaning that settings may struggle to provide consistent and meaningful multilingual exposure for all learners (Welsh Government, 2023). Similarly, Senedd Research (2025) notes that these workforce and resource pressures pose significant risks to delivering the policy effectively.

Conclusion

Bilingualism and multilingualism are associated with a range of cognitive, social, and educational benefits, and early childhood is an optimal period for language learning due to

the brain's heightened capacity to form neural connections and engage in flexible, creative thinking.

Supportive early years environments that value linguistic diversity and provide immersive, responsive interactions offer strong foundations for children learning English or Welsh as additional languages. In Wales, the Curriculum and wider government language strategies encourage settings to embed multilingualism as a core element of high-quality early education. By drawing on evidence-based approaches to language development practitioners can help nurture confident learners equipped to thrive in a bilingual and increasingly multilingual society.

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