

Language and literacy in the digital age

Education Wales (2019) states that, through language, literacy and communication children are able to gain knowledge in their native and international languages. Through this, children will begin to identify links between words and phrases showing awareness in patterns and development of how words are used (Education Wales, 2019, pg: 03). Kuhl (2010) indicates that, children who experience language in their first year will show an impact on their neural circuitry, as a child's brain is accountable for their speech production and cognitive understanding of languages (Universal class, 2022). Infants and children experience different cultures, and environmental factors at young age, this can have an impact on language development (Kuhl, 2010).

'Language and literacy development are major domains of early childhood development' (Universal class, 2022). Universal class (2012) states that, the skills used to communicate with others is involved through this development. From birth babies and children develop their language and literacy through learning to speak their parent's language due to the brains capacity to learn, when they are born (Universal class, 2022). Babies and children can develop their language and literacy through the interactions they have with adults and others around them, for example, toddlers and children will begin to recognise which words are associated with which object (Universal class, 2012).

Welsh Government (no date) suggests the stages babies will begin to indicate speech and language development. Babies under the age of three months will make vocal sounds like cooing or crying to show that they are either happy or sad. Between three months and six months babies will begin to make sound and vocal noises to grab an adult's attention and when being spoken too (Welsh Government, no date). When babies are between six to twelve month's they begin to understand the meaning of smaller words, for example, 'all gone' and will recognise their name. From twelve months onwards babies will begin to use a variety of single words to indicate what they mean. With time they will start to form more and more words together to form a sentence (Welsh Government, no date and Barrett, 1999).

Cambridge University Press (2007) points out that language is a valuable tool which allows adults and children to communicate and interact with one another providing

educational and problem-solving opportunities. An environment in which a child learns or grows up in will influence their language acquisition, this is due to some children growing up in bilingual homes in comparison to children who only encounter one language due to different cultures and environmental experiences (Cambridge University Press, 2007). Cambridge University Press (2007) points out that, having these differences can 'impact children's social, cognitive and linguistic development' (Cambridge University Press, 2007).

According to Barrett (1999) linguistics is an element of language as children use phonetics to speak. There are two different types of phonetics the Articulatory phonetic and the acoustic phonetics. Articulatory phonetics is focused on how children use their tongue, lips and jaw to create a variety of sounds to speak. Acoustic phonetics is the physical properties, for example, the frequency, duration or tone of the voice (Barrett, 1999, pg: 4). Barrett (1999) and Dickinson and Tabors (2001) state that, phoneme helps to differentiate words from one another. A change to certain words will change the phoneme giving the word a new meaning or directory.

Bowcutt (2013) states that, babies and children are naturally interested with their surroundings and will try to understand it. Bowcutt (2013) shows that, through books babies and children will expand their literacy through experiences, encouraging their cognitive, social and emotional development (Tillotson, 2005). Babies will begin to show interest in books expanding their literacy from a young age, this is first indicated when looking at or handling books (Bowcutt, 2013, pg: 3 and Marie Clay 2000). Bowcutt (2013) indicates that, adults should speak to babies as it enriches children's knowledge, language and literacy through communication. Reading out loud to babies and children is very important as it stimulates their brain growth increasing their brain capability. When adults focus on children literature through activities, for example, read write inc, they are allowing children to develop their oral language. (Bowcutt, 2013, pg: 4). 'Comprehension is also a vital aspect of early literacy '(Bowcutt, 2013, pg: 5) as babies from 4 months onwards will begin to recognise their name gaining listening comprehension, this is due to babies needing to hear language directly as its communicative and interactive. Children can develop their literacy skills through storytelling, for example, using illustrative books to capture children's attention (Universal class, 2012). As stated by Berkowitz (2011) oral storytelling is very essential for children as they are able to accompany the story improving their communication

skills (Millard and Gaunt, 2018). Adults are also able to use onomatopoeia and different tones to give the story a real effect. Ensuring eye contact and allowing children to join in provides children with the opportunity to engage and become involved in the activity through facial expressions and body language (Berkowitz, 2011, pg: 36). Berkowitz (2011) points out that, performing a story to children for example, using a different tone for each character, rather than just reading it out loud, offers children with a more lively experience captivating their imagination and creativity. Involving children by asking questions throughout the story will enable them to develop awareness of characters, objects and setting in each story (Berkowitz, 2011, pg: 37). Allowing children to engage in a number of actions throughout the story will help children to remember the sequence in which the story goes in developing their kinaesthetic learning (Berkowitz, 2011, pg: 37).

Yafie et al (2020) suggests that, children can show signs of language delay early on without it being identified, however, signs can be shown through their cognitive or social development. A delay in children's language can be due to the absence of a stimulate environment for them to learn in. Children show indications of language delay when they are at a different milestone stage for their age, when forming sounds, words or sentences (Yafie et al, 2020). Due to the COVID-19 pandemic children had unprecedented modifications to their learning environment (Kartushina et al, no date). Yafie et al (2020) points out that, during the pandemic it was difficult for children to interact with the outside world due to lockdown which resulted in some children lacking a stimulating environment to learn in due to parents busyness at home, for example, working from home, however, Kartushina et al (no date) indicates that, during COVID-19 many parents who were working from home, where given the opportunity to become aware of their child's developmental growth and understand activities they do while being in the settings environment.

Schwartz and Sparks (2019) states that, research suggests that reading is a written language where children learn how letters should sound. This is done through teaching children phonics and requires children to learn language to be able to make connections between sounds and words (Schwartz and Sparks, 2019, pg: 1). Through time children will begin to learn how to connect sounds to words fluently, understanding punctuation and grammar forming sentences automatically. However, if children are unable to comprehend sounds and words they will have difficulty in

understanding what they may be reading (Schwartz and Sparks, 2019, pg: 2). Schwartz and Sparks (2019) points out that, children do not naturally improve reading amongsts the exposure of text, they learn to bond both oral and written language. English and French use letters that support sounds that make up familiar words. However, the Chinese language uses stress and pitch in the voice to show the difference in the meaning of words (Schwartz and Sparks, 2019, pg: 3). Harper (2011) suggests that, there is a link between nursery rhymes and children learning to read, write and spell. Learning rhymes, alphabetical origins and alliteration will encouragingly affect children's reading capacity. Pourkalhor and Tavakoli (2017) show that, most nursery rhymes will have a rhythm or beat, which grab children's attention making it easier for them to remember the words, it also enriches their listening skills. Children can develop educational knowledge and understanding of words in different languages through songs (Pourkhalor and Tavakoli, 2017, pg: 112). Pourkhalhor and Tavakoli (2017) argues that, songs are important to children's language development as it engages children in a more cooperative and fun learning environment.

Mackenzie (2011) points out that, writing involves children's expressive language through mark making, scribbling or drawing (Literacy teaching Toolkit, 2019). Kim (2017) shows that, practitioners and other professionals use the term emergent literacy to best describe the different sets of language and literacy focusing on how significant emergent reading skills are. A framework has been put into best so that adults can understand children's emergent writing abilities (Kim, 2017). Kim (2017) points out that the framework focuses on three domains and these are conceptual knowledge, procedural knowledge and generative knowledge. Conceptual knowledge is the stage where children begun to learn the purpose of writing by recognising symbols and logos and understanding they have a meaning (Kim, 2017). The procedural knowledge stage shows that children begin to develop letter and word writing through the knowledge of the alphabet. Having the opportunity to write allows children to develop their fine motor skills and finger adeptness through grasping, holding and picking up the pencil (Kim, 2017). Kim (2017) indicates that, generative knowledge 'describes children's abilities to write phrases and sentences that convey meaning' (Kim, 2017). Children start learning the foundation of generative knowledge from a young age, through expressing their emotions and feelings orally as well as trying out different ways of written communication, for example re-telling a story.

According to the Digital Competence Framework (2018) digital ability provides children with the confidence to be creative and critical when using different forms of technology. They look at how children's digital skills can be developed and applied into classrooms, for example, hwb. The DCF (2018) and Bowcutt (2013) indicate that, in today's society technology is an essential and successful skill for children to have as children now use e-books to engage in reading experiences rather than a 'traditional' paper book. Through technology and media children are offered a variety of information which can lead to them having different communication outcomes (Heuvel et al, 2018). Nair and Yunus (2021) state that, digital storytelling supports children's usage in digital media, images, recording and videos and provide children with efficient improvement in their social speaking skills. Digital stories allow children to interpret context or content digital stories independently facilitating their speech (Nair and Yunus, 2021, pg: 2). Nair and Yunus (2021) also state that, technology allows children to find widespread information with different views offering children the chance to analyse a variety of research and opinions. Having technological experiences also provides children with an opportunity to enhance their learning tools that can support their developmental growth (Bowcutt, 2013, pg: 7). However, Moore (2011) points out that, children who are two years old and younger develop their language and literacy and brain development through live interactions and not technology screens. Bowcutt (2013) also points out that, children who view tv on a regular basis especially during sleep time have a higher risk of language delays as they grow up. Children who view tv regularly reduce the chance to interact with parents through play, which is critical for their language development (Heuvel et al, 2018). Even though e-books can emit sounds they don't provide the essential words for children to form a sentence (Bowcutt, 2013, pg:7).

To conclude, as shown throughout this essay, language and literacy are very important skills for children's developmental growth. Babies and children both learn to form words and sounds from a young age as stated throughout the essay. Digital technology is vital to children's language and literacy progress however, it can negatively impact their development as well. Both the benefits and disadvantages of COVID-19 and their impact on children language and literacy development has also

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been shown, indicating the vital changes a stimulating environment can have on a child's learning development.

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