

Language and Literacy in the Digital Age

According to Agosto (2016) important literacy skills are developed through storytelling such as cognitive engagement, visualisation, story sequencing and critical thinking. Montag, Jones and Smith (2015) maintain that there is a link between improved language acquisition and early book reading. Al-Harbi (2020) points out that Chomsky believed that there is an inborn capacity for language use and understanding in children. Farrant and Zubrick (2012, cited in Montag, Jones and Smith, 2015) state that if children are read to regularly, it is likely they will have an increased vocabulary. Marsh (2020, p.21) points out that digital literacy is sometimes described as social practice that incorporates writing, reading and multimodal meaning-making using various digital technologies. It involves the acquisition of skills related to using digital technologies and traditional skills linked to alphabetic print. The three storytelling behaviours evaluated in this paper are the use of soft toys and props, changing tone of voice for characterisation purposes and reading stories with rhyme in them.

Cekaite and Björk-Willén (2018) maintain that when adults use dramatic pitch shifts and numerous voices when storytelling they are tools that ensure an affective, cooperative and aesthetic experience. They elicit attuned and enthusiastic responses from the child audience. Furman (2000, cited in Rahiem *et al.*, 2020) points out that meaningful communication and holistic development is supported by children listening to dramatized stories, acquiring their meaning and making the learning more tangible. Kory Westlund *et al.* (2017) states that there was a study involving two robot's reading stories to children, one expressively and one flat. The findings were that children had higher concentration and engagement when listening to the expressive robot. Overall, they demonstrated increased emotional engagement in that story and when re-telling it they had increased integration of the newly learned vocabulary.

During the videos the narrator of the story changed their tone of voice for each character to make it more engaging and interesting. It clearly displayed which character was talking and supported the children's understanding of the storyline and language within the story.

According to Rahiem *et al.* (2020) the use of technology and props enhances the children's thoughts and imagination. They provide sensory stimulation and aid understanding of the story. Mujahidah, Afiif and Damayanti (2021) say that the use of soft toys or media puppets when storytelling is to make the experience interesting, develop children's language skills and encourage active listening. Storytelling with props encourages the children to answer questions about the story, which in turn stimulates children to speak. Welsh Government (2022) states that children should clarify understanding by asking and answering questions. Ahmed, Inam and Saif (2021) maintain that results of a study show that the engagement of children in story re-telling was high after listening to a story with props. They included intricate details, verifying attentive listening and presented a deeper and more meaningful understanding of vocabulary.

The use of soft toys and foods as props within the storytelling videos captured the children's attention and gave the storyteller opportunities to question them and gauge their understanding of the story. The children showed an interest in the props and wanted to use them to act out the story themselves. There were more opportunities for the narrator in the digital storytelling activity to interact with and question the children due to not using so many props, therefore not having too many things to incorporate into the story.

Read, Macauley and Furay (2014) point out that reading stories with rhyme in them can aid word learning and retention. The regularity that rhyme offers and the ways in which both adult readers and young listeners interact with that predictability can develop word memorability. Read and Quirke (2018) state that shared storybook reading can support the initial stage of learning challenging vocabulary. It enables the new words to be highlighted through rhyme and end-of-line placement.

Beaumont (2022) believes that children are familiarised with language and literacy concepts through guided interactions with rhymed picture books, which in turn primes them for writing and reading. Welsh Government (2022) maintains that children should enjoy sharing reading materials and books and be able to handle them like a reader. According to Beaumont (2022) for children with English as an additional language (EAL) repeated oral recitation can be an effective way for them

to practise new vocabulary. The musicality and empathetic patterning of rhymes can aid remembering of new sentence patterns.

The Gruffalo is a useful story to promote rhyming skills with rhyming words at the end of each sentence. The children enjoyed helping the narrator finish off some of the sentences due to familiarity of the story and the rhyming aiding memorability. It also introduced some new and challenging vocabulary to the children.

According to Maureen, Van der Meij and De Jong (2020) supporting children's digital literacy development is important, children should be familiarised with the handling of digital forms of communication. Both traditional text-based reading and writing and digitised reading and writing should be combined to support literacy development. Kucirkova (2018, p.62) maintains that digital stories are effective for EAL children due to interactive characters, pictures and through spoken text. It enables them to see how the story unfolds by listening to it rather than reading it. Nair and Yunus (2021) point out that English language lessons that incorporate digital storytelling improve student's oracy skills. Derbashi (2021) maintains that student's capacity to create narratives independently is improved through digital storytelling in the classroom. It improves pupils' ability to ask questions and organise their ideas and thoughts, whilst encouraging them to express their views and opinions. Welsh Government (2022) believe that children should be taught to independently save and retrieve their digital work.

Rahiem (2021) says that it is important that teachers are technologically literate and have expertise and understanding, enabling them to deliver effective digital storytelling activities. According to Tang, Gu and Xu (2022) during the Covid19 pandemic online teaching and learning took place therefore digital competence has improved for both staff and children. Teachers learnt to use communication and information tools effectively to ensure they could teach productively. Welsh Government (2022) states that children should be familiar with different forms of communication online such as video call and emails. However, Dogan (2007, cited in Yuksel-Arslan, Yildirim and Robin, 2016) and Kucirkova (2018, p.48) believe that staff face difficulties when trying to teach digital storytelling such as the number of students in a small classroom, time constraints, administrative resistance and technology access. Derbashi (2021) points out that using the digital storytelling

method is time consuming and repeatedly using this method can hinder teachers from covering the whole curriculum.

Neumann and Neumann (2013) point out that children's early use of apps on touch screen tablets may develop aspects of emergent literacy skills. Children may learn through independent exploration and the use of tablets which supports Piaget's perspective of learning, alternatively by a parent or teacher scaffolding the learning which is based on Vygotsky's socio-cultural perspective. Takacs, Swart and Bus (2014) say that sound effects, animated drawings and background music are multimedia features that offer similar scaffolding of word learning and story comprehension as an adult. Verhoeven *et al.* (2020) maintain that computer-supported early literacy interventions can demonstrate significant gains in the domains of early reading, letter knowledge and phonological awareness. However, outcomes of classroom-based early literacy interventions are higher. According to O'Byrne *et al.* (2018) when using digital technologies children are more motivated to create, write and share their stories with others. Welsh Government (2022) maintains that children should develop the ability to investigate familiar software's and plan digital tasks, whilst using the success criteria to aid the process. However, Haugland (1992, cited in Purnama, 2021) maintains that if software is unsuitable for young children it can result in aggressive behaviour inhibition.

Brodin and Renblad (2019) believe that it is important to discuss and reflect on books with the children once they have been read, to ensure the shades of meaning do not get lost and vocabulary is properly developed. It will also support understanding of different concepts. Jeung and Kellogg (2019) state that both Bruner and Vygotsky believe that the child's voice does not develop on its own but only with the help of the environment's complete forms. According to Vygotsky, the presence of the final form in the child's linguistic environment causes ontogenesis. O'Byrne *et al.* (2018) say that through storytelling children establish their voices and strengthen social relationships both in and out of the classroom. Schwartz and Sparks (2019) point out that when children learn to read there are benefits of systematic phonics instruction which improves reading comprehension and decoding ability. Furthermore, it benefits children from different socio-economic backgrounds, children with disabilities and children at risk of facing future reading problems. Singh *et al.* (2022) believe that results of a study into the effects of socio-economic status and

vocabulary size, show that dual language and single language infant vocabulary size was influenced by parental education levels. Also, shared book reading may lessen the impact of socio-economic differences on early language development.

Fox (2017) states that the 'Talk for Writing' approach is based on the use of storytelling and can impact progress in composition, writing and language acquisition. It is a tool used to close the gender gap, facilitating kinaesthetic learning with hands on experiences, whilst using a multisensory approach. This engages boys in their learning and builds confidence. Byington and Kim (2017) believe that practitioners can promote writing by providing read-alouds. Children can be encouraged to write stories, letters, lists and messages for characters in the stories. Children's emergent writing can be supported by scaffolding writing activities which engage children in expanding their procedural, conceptual and generative knowledge. Rao, Newlin-Haus and Ehrhardt (2016) say that interactive read-alouds promote literacy development by providing opportunities to interact with the text, teachers and peers.

According to Dickinson and Morse (2019, p.26) language development is associated with the quality of a child's attachment relationship, linking to Bowlby's theory. Sensitive and warm interactions including complex language and considerable talk fosters language growth. Bus *et al.* (1997, cited in Cline and Pope Edwards, 2017) maintain that parents of children with strong attachments would be more engaging and effective instructors for their children during joint reading. If a child has a secure attachment status, there is a relation to higher quality and more frequent book-reading interactions. Dickinson and Morse (2019, p.28) state that children that are securely attached often come from homes where reading is widespread and they have an improved capacity for literacy-related activities. Schröder *et al.* (2019) say that results of a study show that there were lower language and intelligence skills on children with disorganised attachment in comparison to children with secure attachment.

Yafie, Giavarini and Nur Maulidia (2020) point out that some children experience language delays and Late Language Emergency. There are some factors that may contribute to language delays such as the pandemic causing children to have reduced interactions with the outside world and other children. Also, parents being

too busy to stimulate their children. Hurlock (1978, cited in Yafie, Giavarini and Nur Maulidia, 2020) states that Montessori believed that children between the ages of three and six are in a sensitive period and need stimulation to avoid barriers to their development for example language development. According to Takeuchi and Stevens (2011, cited in Goldschmidt, 2020) the pandemic gave parents opportunities to partake in co-viewing television programmes and engaging in educational apps which enabled learning about new concepts and spurring conversations. This in turn developed vocabulary and a broader understanding of language. Noltemeyer *et al.* (2021) maintain that according to Maslow both deficiency and growth needs must be achieved before optimal functioning can occur. This can have an impact on a child's academic achievements for example language and literacy development, due to this being an esteem need which is found in the growth needs area in a child's hierarchy of needs.

Overall, reading to children regularly has a positive effect on language, literacy and communication skills. Adults should ensure storytelling is interesting and engaging for the children which in turn develops their vocabulary and understanding of the story. Digital storytelling is important due to developing both literacy skills and digital competence for staff and children. Technology is used widely in today's society, therefore it is beneficial to have a broad understanding of how to use it effectively within the education sector. Traditional storytelling with children is favoured by many adults due to the enjoyment of reading a physical book, looking at the pictures and turning the pages. However, digital storytelling is increasing in popularity, but some people feel more training and resources are needed to use it most beneficially.

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