

Early language skills

The role of the home learning environment and emerging insights into the impact of the pandemic

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Children’s literacy development begins long before formal schooling, with parents¹ and the home environment exerting important influences on the development of their children’s language skills. Indeed, research indicates that a home environment that encourages learning is one of the most accurate predictors of a child’s achievement (see, e.g., [Roulstone et al., 2011](#); [OECD, 2012](#)). A focus on the early years and the home learning environment of children is therefore crucial to ensure that they get the best possible foundation for their literacy skills.

The early years of a child can also have a profound impact on their experience of primary school, secondary school and beyond ([Pordes Bowers et al., 2012](#); [Ipsos Mori 2020](#); [Sylva et al., 2014](#)) and lay the foundation for lifelong health, learning and earning potential ([Asmussen et al., 2016](#); [Roulstone et al., 2010](#); [Early Years Healthy Development Review 2021](#)). Differences by socioeconomic background are already apparent at this early age, too, with children from the poorest families being up to 19 months behind in their vocabulary at the age of five compared with their more affluent peers ([Law et al., 2017](#)). [This can](#) affect their later literacy and ability to learn, as well as increasing the risk of them developing behavioural and mental health problems later in life ([Sutton Trust, 2012](#)). In 2020, 96% of the 58 schools

¹ The word ‘parents’ is used throughout this report for the sake of simplicity. However, it also includes carers.

we surveyed were concerned about communication and language development of children who had just started school ([Bowyer-Crane et al., 2021](#)).

It has been well established that the home learning environment, in comparison with other environments, is particularly important for child development. Indeed, although early years practitioners provide essential support with a child's development during this period, parents and the home learning environment have a greater influence on attitude towards, and propensity for, learning ([FYT, NCB, NLT, People 2018](#); [Pordes Bowers et al., 2012](#)). For example, EPPE ([Sylva et al., 2004](#)), which investigated the effects of pre-school on children's development, found that what parents and carers do makes a difference to young children's development. In fact, parental involvement in activities such as reading to their child and visiting a library were found to be significant positive influences that account for differences in attainment and children's cognitive progress. The findings from this study also show that the quality of the home learning environment is more important to intellectual and cognitive development than parental factors, such as occupation and education, suggesting that what parents do with their child is more important than who they are. During the pandemic, when many parents had to take on the teacher role in the home, over 53% of them said that they had felt more engaged with their child's learning compared with before lockdown ([Parentkind, 2020](#)). This engagement provides a unique opportunity to consider the role of parents in children's early learning at home.

Encouragingly, research has also shown that what parents do at home can also moderate the effect of disadvantage. As mentioned earlier, children from the poorest families can be up to 19 months behind in their vocabulary at age five compared with their more affluent peers ([Law et al., 2017](#)). However, research has shown that a good-quality home learning environment in early years serves as partial protection against the effects of disadvantage up to the age of 14 ([Sylva et al., 2012](#)).

It is important to consider the influence of the pandemic on the home learning environment and early years. Indeed, 76% of schools reported that children who started reception in 2020 needed more support than children in previous cohorts, with children struggling in particular with communication and language, personal, social and emotional development, and literacy ([Bowyer-Crane et al., 2021](#)). Additionally, children in reception during the first lockdown made less progress than expected, particularly in literacy and maths; and those from disadvantaged backgrounds made less progress than their peers, although socioeconomic background was not a strong predictor of progress and was not linked with the amount of home learning parents were doing ([Nash et al., 2021](#)). The new [Ofsted report \(2022\)](#) looking at education recovery in early years providers has found that the pandemic has affected children's communication and language development. Indeed, the report states that "providers are making more referrals for external help than before the pandemic and are waiting longer for this specialist help".

This report was commissioned by Paramount as part of a wider partnership between the National Literacy Trust and Blue's Clues & You!. It synthesises information from the following sources to provide insight into the importance of the home learning environment and early language skills:

- Existing literature
- Survey data of parents the National Literacy Trust commissioned from One Poll in 2019 (n = 2,000) and 2020 (n = 2,000), and Savanta ComRes in 2021 (n = 1,562)
- Insight from the 2015 and 2021/2 evaluation of our Early Words Together programme

What is a home learning environment?

For the purposes of this report, we define the home learning environment as “the physical home and the interactions in and around the home that implicitly and explicitly support a child's learning” ([HM Government & National Literacy Trust, 2018, p.9](#)). Decades of research has shown that there are specific activities that parents can undertake with their pre-school children at home that have a positive effect on their development. The Effective Provision of Pre-School Education (EPPE) Project developed an index of behaviours that they found to positively impact language development in the early years, with the influence of these behaviours still being felt in primary school and beyond. These activities were: reading, singing songs and rhymes, painting and drawing, taking children on visits (such as to the library), playing with letters and numbers, and creating regular opportunities for them to play with peers ([Sylva et al., 2004](#)).

Frequency of some key learning activities in the home in 2021

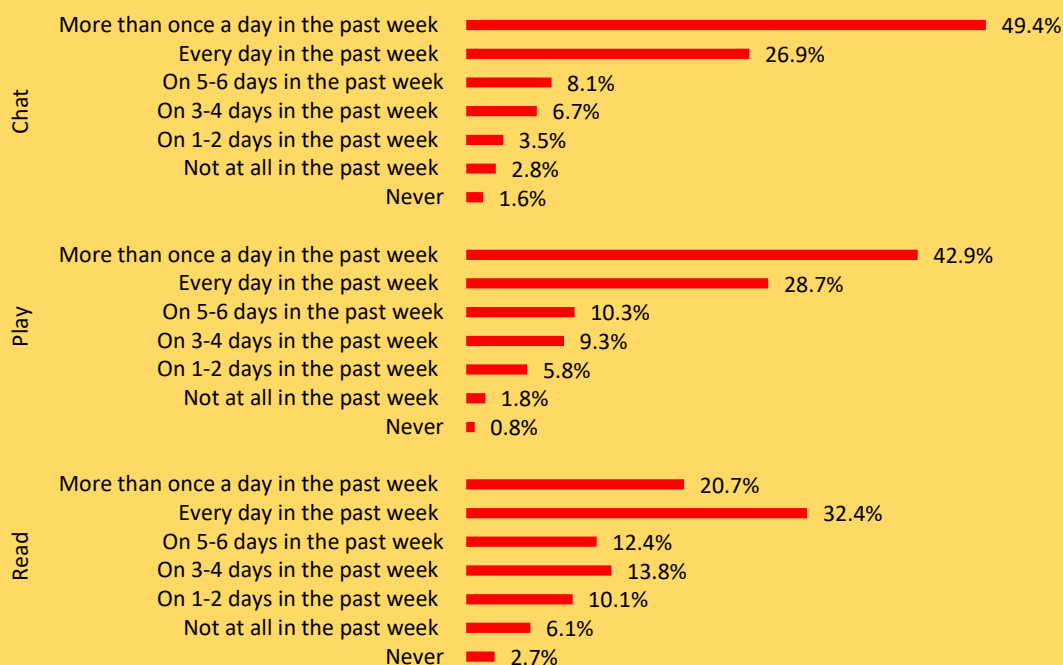
In the summer of 2021, we surveyed 1,562 parents of children from birth to age five to find out how often they had participated in different learning activities in the home with their children over the last week.

As shown in Figure 1, most parents were doing the three key home learning activities (chat, play and read) at least once a day or more. For example, 76.3% of parents said they had chatted to their child at least once a day in the past week, and 71.6% of parents said they had played with their child at least once a day in the past week. However, just 1 in 2 (53.1%) parents said that they had read with their child at least once a day in the past week. Indeed, 1 in 11 (8.8%) parents told us that they either hadn't read at all with their child in the past week or that they never read with their child.

While there were no differences in the frequency with which parents chatted or played by socioeconomic background, fewer parents from disadvantaged backgrounds said that they read at least once a day compared with their parents from more advantaged backgrounds (50.4% vs. 55.7%).

Slightly fewer parents from disadvantaged backgrounds also said they had chatted to their child at least once a day in the last week compared with parents from more advantaged backgrounds (75% vs. 78%).

Figure 1: Frequency of key home learning activities in 2021



Impact of the home learning environment on early language outcomes

A wealth of evidence shows that a home learning environment is very important for language and literacy development specifically. As a report by the Nuffield Foundation ([Hillman & Williams, 2015](#)) demonstrates, aspects of the home environment (e.g., number of books and toys available and frequency of library visits) are important predictors of language development. For example, Hendry and colleagues ([2022](#)) found that a positive home learning environment can predict higher levels of vocabulary, spelling, literacy and increased cognitive skill in young children.

More specifically, [Niklas and Schneider \(2013\)](#), who investigated the role that a literacy environment at home plays in the development of language competencies in the German context, found that the home learning environment is an important predictor of early phonological awareness and vocabulary. Similar results have been found earlier in an English-speaking context by [Sénéchal & LeFevre \(2002\)](#) who examined the interrelations between early home literacy experiences, developing receptive language, emergent literacy skills, and reading achievement. These findings suggest that home experiences are linked to fluent reading through early literacy skills ([Sénéchal & LeFevre, 2002](#)). Finally, a longitudinal study commissioned by the Department for Education found that children who owned more books

and were taken to the library more frequently at age two achieved higher scores in language and communication when entering primary school ([Roulstone et al 2010](#)).

Books in the home in 2021

Our own survey of parents of children aged from birth to five in the summer of 2021 showed that they had, on average, 34 children's books at home, whether owned or borrowed. However, more than a third (35.6%) said they had 10 or fewer children's books at home, while just 1 in 10 (11.1%) had 100 or more.

There were also differences in book ownership by socioeconomic background, with more parents from disadvantaged backgrounds having 10 or fewer books compared with those from more affluent backgrounds (39.1% vs. 32.3%). Also, while parents from more affluent backgrounds had an average of 37 children's books at home, this decreased to an average of 30 for parents from lower socioeconomic backgrounds.

The Early Childhood Project ([Sonnenschein, Baker & Serpell, 2010](#)) that took place in the United States between 1992 and 1997 provided further evidence of the importance of the home environment to children's literacy development. The results of this five-year longitudinal study showed that parents' beliefs and children's home experiences made a difference to children's literacy development ([Sonnenschein, Baker & Serpell, 2010](#)). The study showed that even though children's home literacy experiences differed based on their family's income, the "intimate culture of the home" (parental beliefs, types of activities children engage in and children's literacy interactions with family members) was a more powerful predictor than demographic variables ([Sonnenschein, Baker & Serpell, 2010](#)).

These results are consistent with research findings in the UK (e.g., EPPE: [Sylva et al., 2004](#) and Growing up in Scotland: [Melhuish, 2010](#)). As with the aforementioned US study ([Sonnenschein, Baker & Serpell, 2010](#)), parental beliefs and attitudes can influence a child's experience of literacy; in this research, in terms of non-cognitive outcomes like reading enjoyment. As the PIRLS 2011 study ([Mullis, Martin, Foy, & Drucker, 2012](#)) highlights, young children who see adults and older children reading or using texts in different ways learn to appreciate and use printed materials.

Research has suggested that the amount of language children hear is important: the more time their parents spend talking with them, the more they hear, and the more types of words they are exposed to, so they tend to use more themselves ([Cross 2007](#)). Other studies suggest that it is the quality of interaction rather than quantity that is important ([Outhwaite, 2020](#)): when parents use infant-directed and responsive speech (i.e. gentle but exaggerated baby talk) this reinforces several key skills, including differentiating the sounds of words, associating words with emotional expressions, grasping the meaning of specific words and

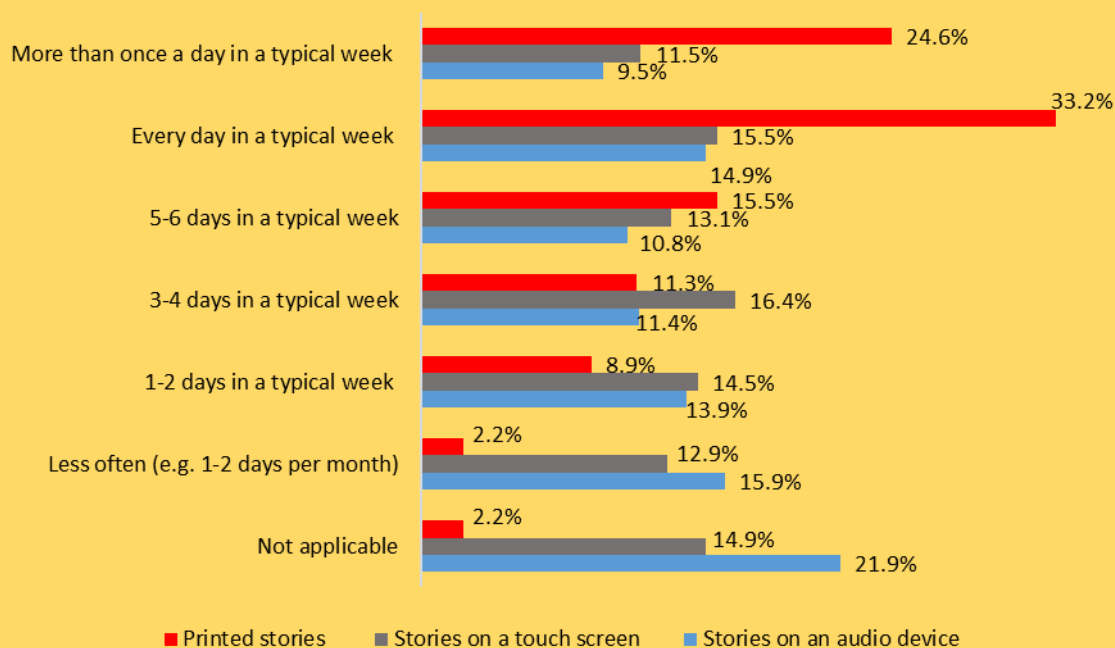
using language ([Axford & Albers 2018](#)). Children develop strong language skills when parents ask open-ended questions, ask children to elaborate and focus on topics of interest to the child, as well as respond positively to children’s attempts to communicate ([Cross 2007](#); [Finnegan et al., 2015](#)). In contrast, excessive use of negative language, closed questions or short instructions can limit a child’s confidence in developing more complex language skills ([Finnegan et al., 2015](#)).

Overall, early language acquisition contributes to children’s ability to manage emotions and communicate feelings, and to establish relationships and think symbolically ([Law et al., 2017](#); [Pordes Bowers et al., 2012](#)). Indeed, children with more positive home learning environments have also been found to be better adjusted in terms of behaviour and wellbeing during both the primary years and secondary schooling ([Sammons et al 2015](#)).

Sharing stories in different formats in 2021

Sharing stories is one of the key activities parents can do at home with their children, with various formats being available to parents. We were interested to see how often parents of children aged from birth to five shared stories with their child in 2021 and what formats they used. As Figure 2 shows, printed stories were shared more frequently than other formats, with more than twice as many parents sharing stories in print format daily or more than once a day (57.8%) compared with stories on a touchscreen (27.0%) or audio device (24.4%).

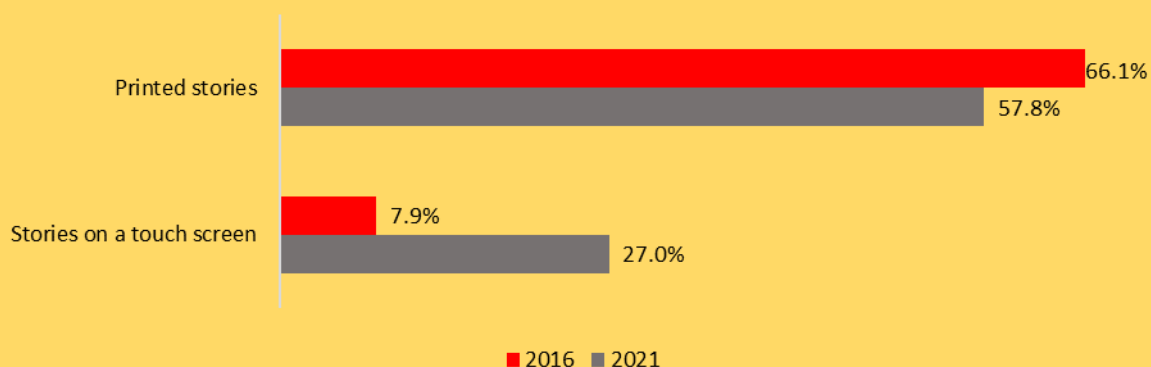
Figure 2: Thinking about printed story books and stories on a touchscreen or audio device, how many days, if at all, in a typical week does your child look at or listen to stories with you?



More parents from more affluent backgrounds said that they shared stories in print more than once a day (27.4% vs. 21.6%) compared with parents from more disadvantaged backgrounds, but there was no difference between groups in relation to daily reading in print (33.7% vs. 32.8%) or for any other frequencies by format.

We were able to compare findings from 2021 to data we had collected in 2016. As Figure 3 shows, while the percentage of parents sharing stories daily in print decreased slightly from 66.1% in 2016 to 57.8% in 2021, the percentage sharing stories daily on a touchscreen increased threefold between 2016 and 2021, rising from 7.9% to 27.0%. This indicates that while stories are shared more often in print, sharing stories on a touchscreen is increasingly popular.

Figure 3: Percentage of parents sharing stories with their child daily by format in 2016 and 2021



Impact of the home learning environment beyond language and the early years

It has to be noted that the impact of a home learning environment on child development can be far reaching. As the Growing up in Scotland ([Melhuish, 2010](#)) report highlights, several studies have established the long-term influence of cognitive ability. The report cites research by [Feinstein \(2003\)](#) who worked with data from the 1970 Birth Cohort Study (BCS), which showed that the ability score at 22 months predicts educational qualifications at age 26. In addition, research by [Sammons and colleagues \(2015\)](#) on the long-term role of the home learning environment in shaping academic attainment shows that parents' reports of the frequency with which they engage in specific learning activities with their child at a young age (their measure of the home learning environment) continues to predict variations in academic attainment up to age 16. Similarly, longitudinal studies have found the home learning environment to be an important predictor of later linguistic competencies of children partly through direct connections and mainly by being closely associated with precursors of literacy development such as vocabulary and letter knowledge ([Niklas and Schneider, 2013](#)). These

findings suggest that it is vital for parents to support their children’s development early in the home setting.

The impact of the home learning environment on the economy has also recently been quantified. Research by Pro Bono Economics ([Kerr & Franklin, 2021](#)) has shown that improving young children’s pre-school language skills could boost the economy by up to £1.2 billion over the course of their lifetimes, while failing to support these children could cost up to £327 million for each cohort of three-year-olds. The report also explores the economic benefit of parents engaging in more home learning activities, particularly among parents whose children are at risk of language difficulty at the age of three. The report estimates that if parents of children at risk of vulnerable language skills did one additional home learning activity per day, such as reading, playing with letters or singing songs, their child’s language skills could improve, and subsequently result in approximately £170 million in benefits for each cohort of three-year-olds. Furthermore, engaging in two additional home learning activities per day could be sufficient to lift them out of the at-risk of vulnerable language skills group.

Emerging insight into changes in the home learning environment during the pandemic

Some research has shown that the pandemic and associated lockdowns have led to an increase in home learning activities ([e.g. Davies et al., 2021](#)). For example, one international study looking at the vocabulary of 1,700 children aged 8-36 months at the beginning and end of the first lockdown period found that children gained more new words than expected based on normative data, possibly because caregivers were more aware of their child’s development during this time, or “vocabulary development benefited from intense caregiver-child interaction during lockdown” (p.4 [Kartushina et al., 2022](#)).

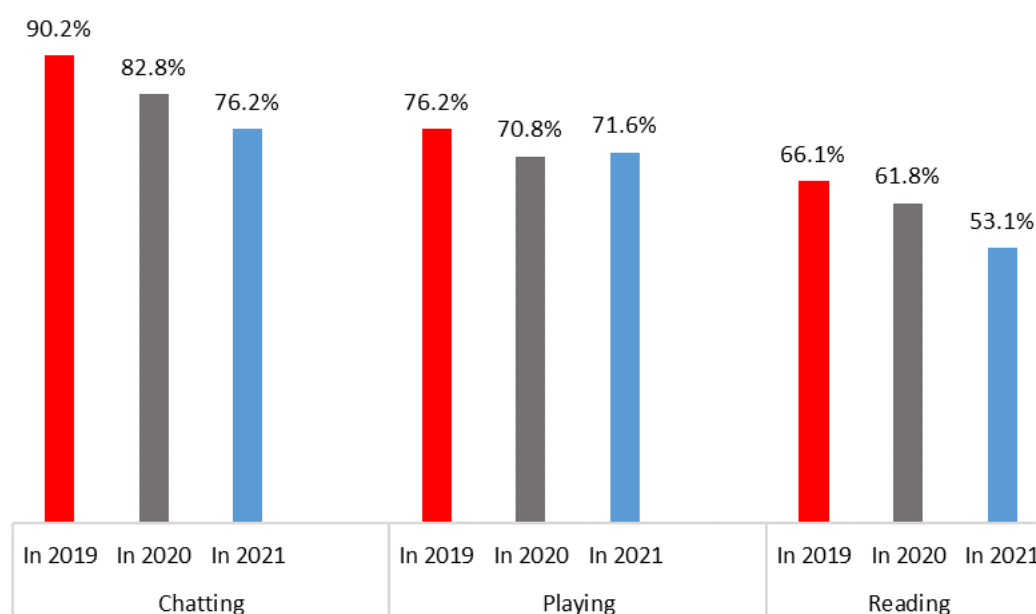
However, our own research ([Palmer-Crew & Clark, 2021](#)) has shown that, overall, parents engaged in fewer home learning activities in 2021 compared with the two previous years. In summer 2021², we asked 1,562 parents of children aged from birth to five across the UK about the extent to which they carried out seven of the key home learning activities: reading (including books, e-books, and picture books), chatting, playing, singing, painting/drawing, looking at the alphabet and playing outside the home (e.g. at a library or play group). We were able to compare the findings with two previous surveys we had conducted with parents in 2019 and 2020³.

² In August 2021, the National Literacy Trust commissioned Savanta ComRes to conduct a survey of 1,562 parents of children from birth to age five. Sample make-up: 1,562 parents (female $n = 1,265$; male $n = 294$; would rather not say $n = 3$). Children were aged from birth to five (female, $n = 968$; male, $n = 582$; would rather not say $n = 12$), with a similar number of children in each age band. The sample was evenly split between social grades ABC1 (51.7%) and C2DE (48.3%). Most parents in the sample were educated to post-secondary ($n = 324$), vocational ($n = 271$) or undergraduate degree level ($n = 441$).

³ National Literacy Trust survey commissioned One Poll to conduct the surveys in 2019 and 2020.

Overall, fewer parents engaged in all seven home learning activities in 2021 (during the pandemic) compared with 2019 (before the pandemic). As Figure 4 shows, only 3 in 4 parents told us in 2021 that they had chatted with their child at least once a day in the past week compared with 9 in 10 parents in 2019, a difference of 14 percentage points. Similarly, only 1 in 2 parents said in 2021 that they read with their child at least once a day compared with 2 in 3 in 2019, a difference of 13 percentage points.

Figure 4: Percentage of parents who reported doing activities with their child in 2019, 2020 and 2021



The negative impact of the pandemic on home learning environment has been similarly established by others. For example, The Education Endowment Foundation researched the impact of pandemic restrictions on the vocabulary development of young children, finding that the measures left children less exposed to conversations and everyday experiences ([Rose et al., 2021](#)). Of the 58 primary schools surveyed:

- 76% said pupils starting school in September 2020 needed more support with communication than in previous years
- 96% said they were concerned about pupils' speech-and-language development
- 56% of parents were concerned about their child starting school following the lockdown in the spring and summer

Although emerging insight suggests that there have been changes in the home learning environment, it is more challenging to explain these changes. The Parent Infant Foundation, Home Start and Best Beginnings published a report titled *No One Wants to See My Baby* based on a survey with practitioners and volunteers ([2021](#)). The survey found that 30% of parents said health visitor drop-in clinics were no longer operating in their area, 28% said health visitor

appointments were still online or by telephone only, and 12% said baby and toddler groups were no longer running. A reduction in contact hours (if any remain at all) between parents and healthcare professionals may have removed the opportunity for parents to learn about or discuss the benefits of fostering a productive home learning environment for their child.

Additionally, a survey conducted by children's brand Stokke mid-pandemic found that:

- 84% of parents were shocked at how their life changed
- 22% struggled with a lack of confidence in their abilities as a new parent
- 71% were reluctant to ask for help during the first weeks, often because they were worried about being labelled a bad parent or because they didn't want others to think they couldn't cope ([Stokke, 2021](#))

Despite these increased pressures, one study found that during the lockdown, parents who viewed early learning, affection and attachment as important were only slightly more likely to engage in activities, suggesting that despite parents' positive attitudes, their ability to engage in activities was constrained by circumstances ([Hendry et al., 2022](#)).

There have likely been various reasons for changes in the home learning environment during the pandemic. Indeed, it's not far-fetched to consider the increased isolation and lack of contact and support from others leading to insecurity for parents when it comes to supporting their child in the home. With these pressures, developing a home learning environment may be of less priority to a parent. Alternatively, rather than not being a priority, some parents may have lacked the resources or time to consider alternatives to early learning engagement. Finally, stress and anxiety surrounding the pandemic may have prevented parents from engaging in activity as normal.

Disadvantage and the pandemic

Because the impact of the lockdowns is likely to be worse for those with lower incomes, the disparities in the quality of the home learning environments of children from disadvantaged families and others are likely to increase with the current crisis ([EPI 2020](#)). Indeed, some research shows that disadvantaged parents were less likely to engage in enriching activities ([Gonzalez-Gomez et al., 2020](#)), and parents who have experienced financial difficulties were more likely to say they have spent less quality time with their child ([Ipsos Mori 2020](#)) during the pandemic.

Early Words Together

From a practical standpoint, the home learning environment is more amenable than demographic factors such as parental education and parental income ([Baker, 2003](#)). Therefore, initiatives can be developed to support parents' engagement in positive activities

that improve outcomes for their children. One such initiative, Early Words Together, was developed by the National Literacy Trust to support parents and practitioners to help children acquire the early literacy skills they need to succeed. Working in areas of economic disadvantage, the programme offers a suite of support for parents of children from birth to five⁴, and also provides training for early years' staff to increase their knowledge and confidence to be able to empower parents to support their child's early communication and literacy development by building literacy into daily life. Through weekly sessions focusing on extending talk, songs and rhymes, reading and sharing books, mark-making and getting out and about, parents gain the skills and confidence they need to support their child at home.

To address some of the gaps highlighted in previous research, an early independent evaluation of the programme for children aged three to five by Coventry University ([Wood et al., 2015](#)) found that the programme increases children's language skills, with a significant improvement in the understanding of spoken language for girls in particular. Additionally, Early Words Together has also been found to have a positive impact on parents. The independent evaluation showed that the programme had increased the amount of parent-child talk in 88.1% of families. Parents' confidence to share books with their children and singing with their children also increased, as did their understanding of the importance of talking to children.

A recent evaluation of 182 parents and 32 practitioners who took part in the programme aimed at families of children aged two between 2020 and 2021 indicated that the programme has been successful in supporting children's engagement with stories, songs, mark-making and interaction with other children:

- 3 in 5 (65%) parents said that after taking part their child paid attention to stories more than before
- 3 in 5 (65%) felt their child interacted with other children more than before after taking part in Early Words Together, which is particularly encouraging in the light of the reduced opportunities for social interaction brought on by the pandemic
- 3 in 4 (76%) parents said they understood the importance of talking to their child more than before
- 3 in 5 (62%) felt more confident to share books with their child

Changes in parents' knowledge and confidence were also reflected in how they engaged in activities with their child:

- 3 in 5 (60%) shared stories with their child more than before taking part in the programme

⁴ Specific programmes include Early Words Together for children aged three to five, Early Words Together at Two, specifically designed for children aged two, and First Words Together for children younger than two.

Finally, there were also observed changes in practitioners' knowledge and confidence to support parents in engaging with their child's early language and literacy development. This was particularly the case for overall engagement with parents, as 97% of practitioners felt increasingly confident and 94% felt increasingly skilled to do so.

Conclusion

While the role of the home learning environment in supporting children's early language and literacy development has been well established, it is undeniable that it has been significantly affected by the COVID-19 pandemic. Interestingly, however, the impact was not the same in all homes. For some, the lockdowns provided more opportunity for parents to engage with their child's early literacy development ([Kartushina et al., 2022](#)), whereas for others, the increased pressure of life led to a reduced focus on home learning activities ([Palmer-Crew & Clark, 2021](#)).

Regardless of the challenges we have faced over the past two years, we now have a greater opportunity to re-engage children and parents with home learning. Our Early Words Together programme has been proven to be a brilliant opportunity for parents to engage further with various activities that can support their child's early literacy development. We will continue to provide this support across the UK and ensure that children from the most disadvantaged communities received the support they deserve.

About the National Literacy Trust

Our charity is dedicated to improving the reading, writing, speaking and listening skills of those who need it most, giving them the best possible chance of success in school, work and life. We run Literacy Hubs and campaigns in communities where low levels of literacy and social mobility are seriously impacting people's lives. We support schools and early years settings to deliver outstanding literacy provision, and we campaign to make literacy a priority for politicians, businesses and parents. Our research and analysis make us the leading authority on literacy and drive our interventions.

Literacy is a vital element of action against poverty and our work changes life stories.

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