Research relating to Time For Sounds

THE LINKS BETWEEN COMMUNICATION DISABILITY AND LITERACY

Language is central to all learning therefore:

• Children with a speech and/or language difficulty often have some difficulty with some aspect of learning to read and write.

• Children with poor vocabulary are less likely to be able to use their word knowledge to support their understanding of the text. Weak grammatical skills may limit a child’s ability to use sentence context to read unfamiliar words.

• Children who are unable to understand complex oral language and word meanings are likely to have poor reading comprehension.

• Children who find making inferences difficult will also find making sense of extended written text difficult.

• Children on the autistic spectrum can present as hyperlexic, having excellent decoding skills but showing limited understanding of what they have read.

• Weak literacy skills may impact on the growth of vocabulary and/or conceptual development.

From spoken language to literacy (reading and writing), we need phonological awareness. In particular, we need to make the link between the graphemes (letters) and phonemes (sounds). Experienced readers rarely need to ‘sound out’ the letters to build up a word in the way that early readers do.

In order to learn to read, the following strategies need to be used:

• Sound out the letters

• Build up the letter patterns

• Apply knowledge of other words and rules

• Connect the relationship of the words grammatically

• Use the context for clues

As we can see, the first strategy, known as decoding, is to be aware that words are made of individual speech sounds and that they link to letters. Decoding can take place without comprehension, but comprehension cannot take place without decoding. If children cannot read graphemes (letters/letter groups) they will have difficulty reading words. If they cannot read words they will be unable to read the text and, subsequently, if they cannot decode text effortlessly they will be unable to comprehend what they read.

There is a strong and specific link between early phonological awareness and the later acquisition of reading and spelling. Training programmes that improve levels of phonological awareness have shown to have positive consequences for later literacy development (Lundberg et al. 1988). It is a well known fact in research that children with speech and language impairments often go on to have literacy difficulties. Many studies have identified a close relationship between phoneme awareness and later
reading proficiency (Snowling 1985; Goswami and Bryant 1990). Phonological awareness develops along a continuum: awareness of larger units is developed prior to awareness of smaller units (Caravolas and Bruck 1993). According to Burt et al. (1999) children as young as 3 years of age can be aware of onsets and rimes, and, by this age, a strong relationship has already been established between the knowledge of nursery rhymes and the development of intra-syllabic awareness skills (Maclean et al. 1987). Goswami and Bryant (1990) also argue that phonological awareness at the onset rime (see page 11) level, evident in rhyming skills, contributes significantly towards alphabetic literacy. They also argue that explicit awareness of the onset rime division is within the capacity of the normally progressing preschool child and is evident in their ability to detect rhyme.

**DEVELOPMENT OF TIME FOR SOUNDS**

**PILOT STUDY**

Preschoolers can be trained to make judgements about the onset rime division (Lundberg et al. 1988). Children who remain insensitive to the onset rime division are at risk of reading and spelling failure (Bradley, 1988). Children with speech disorders are at risk of reading and spelling problems and children with specific learning difficulties often have subtle speech problems.

Because of this link between spoken and written language, a two-year study, working in collaboration with the Stockport Education Authority and individual teachers and teaching assistants, was undertaken in 2001 to develop a programme which develops the phonological awareness skills of at risk preschool children.

The study initially involved two mainstream primary schools, including three reception classes, a Learning Support Assistant (LSA) funded by the individual school, and a Speech and Language Therapist (SLT).

The SLT assessed the 76 children in two reception classes in one school and one reception class in another school. This was done using the first three measures of phonological awareness (syllable awareness, rhyme awareness and alliteration awareness) in the *Preschool Inventory of Phonological Awareness (PIPA)* a published and standardised assessment of phonological awareness skills.

Thirty-six children were selected to take part in the programme. eighteen children were placed in a phonological awareness group (PAG) and exposed to phonological awareness in a very explicit and structured way. The remaining eighteen were placed in a vocabulary control group (CG) and exposed to phonological activities but in a less explicit way, the focus being on vocabulary development.

The work with the children in both groups took place in groups of six for a block of eight weeks.

The SLT visited the school once a week to demonstrate therapy ideas, review progress and plan sessions that the LSA then carried out on two different occasions during the week with the same group of children. The Class Teacher (CT) had the opportunity to observe at least one of the weekly sessions with the SLT, and the CT and LSA had time to liaise on a weekly basis.
Pilot study results
The results were striking. Not only did both groups demonstrate increased scores on formal assessment, but the difference between the phonological awareness group and the vocabulary group was found to be significant in all three areas. The Class Teachers and/or LSA reported that there were noticeable positive improvements in levels of attention and listening skills. In one of the participating schools the listening and attention approach taken during group sessions had been disseminated to all teachers and accepted as a whole school approach. Following the success of the pilot study the LEA funded two half-day SLT sessions each week to enable more schools to benefit from the approach.

A GRAPH SHOWING THE AVERAGE RESULTS FOR BOTH GROUPS

A GRAPH SHOWING 'THE AVERAGE PERCENTAGE INCREASE' FOR BOTH GROUPS

KEY
Pink = Phonological awareness group,
Yellow = Control group
s pre = syllable awareness before intervention
s post = syllable awareness after intervention
r pre = rhyme awareness before intervention
r post = rhyme awareness after intervention
a pre = alliteration awareness before intervention
a post = alliteration awareness after intervention
CONCLUSION

The findings of the pilot study suggest that preschool children can be trained in phonological awareness and that the ‘Training Programme’ developed within this study has a significant effect on levels of phonological awareness and that children with deficits in phonological awareness need phonological awareness activities to be taught in a very explicit way.

References


Royal College of Speech and Language Therapists.


