

Article following address at Patoss International Conference 2021

Key Issues to Highlight at Transition Periods. Early years to Primary; Primary to Secondary – Strategies to Address Them - Dr Grace Elliott -

I am a Special Educational Needs Co-ordinator within a Primary School and, throughout my career as a teacher, I have been developing my knowledge in the field of language and literacy. After completing a MSc at Oxford University focusing on dyslexia, I went on to study for an EdD to further research the causes of poor reading comprehension, and in particular the most effective interventions for poor comprehenders. A particular focus of my research has been related to adolescent poor comprehenders, as very little is known about reading in adolescence, with research and theory focusing on reading in childhood (Nation, 2005; See & Gorard, 2014).

It is widely regarded that learning to read is one of the most crucial aspects of a child's learning, and a great deal of a child's formal education will depend upon being able to read with understanding. There is a widespread assumption that children can read with understanding when they leave primary school, however, international assessments show that 18% of adolescents are unable to comprehend simple texts (Jerrim & Shure, 2016). This means that they might find it hard to understand an advert on a train, or a warning sign in the Science Lab. Furthermore, children from low income families are twice as likely to be behind compared to their peers. Young people who leave school without good literacy skills are held back at every stage of life, and the most recent estimates suggest that low levels of literacy cost the UK economy at least £20 billion a year (Quigley & Coleman, 2019).

Although there is a broad base of research on the difficulties underlying poor word recognition, in contrast, our understanding of how best to teach the skills to support successful reading comprehension and mitigate the consequences of poor reading comprehension is less advanced (Clarke et al., 2017). Despite repeated efforts, the proportion of children struggling with reading comprehension has remained static over the last decade, and secondary school teachers are also typically not well prepared to meet the needs of students with reading difficulties in their classroom (MacMahon, 2014).

This is perhaps due to the complex processes required for successful reading comprehension to occur. When we are reading for meaning, there are a whole range of cognitive and linguistic operations at play, such as identifying individual words, activating contextually-appropriate meanings, making causal connections, making inferences about situations that are not fully described in the text and using our background knowledge. This is all done while holding information in our memory. Indeed, comprehension is not a verbatim record of what has been read, replicating its form and structure. Good comprehension skills require students to build a mental model, or situation model, culminating in a rich interpretation of the text that goes beyond what is explicitly stated (Van Dijk & Kintsch, 1983).

The simple view of reading sees reading comprehension as the product of decoding and listening comprehension (Gough & Tunmer, 1986). However, this view may be "too simple" (Kirby & Savage, 2008), and it has been suggested that other factors are also important for reading comprehension, including reading fluency, vocabulary knowledge, grammar, inference and metacognition (Language and Reading Research Consortium (LARRC), 2015; Lervåg et al., 2018). Professor Kate Nation has presented an expanded view of the Simple View of Reading (see her talk at the Patoss Conference 2020), which outlines the importance of the

interconnections between language, reading comprehension, decoding and linguistic comprehension (Nation, 2019).

Small-scale evaluations of inference-making interventions and mental imagery training have yielded promising results for improvements to reading comprehension (Yuill & Oakhill, 1998), however very little attention has been paid to the core components of reading. One Randomised Controlled Trial (RCT) has evaluated the impact of three intervention programmes for poor comprehenders alongside a waiting list control group. The interventions included a text-level program, an oral language program, and a combined program. All participants in the study were assessed prior to the start of the intervention, 10 weeks later at the mid-point of the programme, and then following a further ten weeks at the end of the intervention. The students were also assessed 11 months later to investigate the maintenance of gains.

All intervention groups made significant progress over twenty weeks and made an average gain of three points in their reading comprehension standard score, indicating that there were similar benefits associated with the text level, oral language and combined intervention programmes when compared to the waiting list control group. However, it was striking that the oral language group maintained these improvements, and continued to progress to make significant gains (an average gain of 7 standard points) when tested 11 months after the intervention programme finished. Although all interventions improved comprehension skill, the effect was most durable when oral language was specifically targeted.

The lasting effect of the oral language intervention allowed the authors to conclude that oral language difficulties were a causal risk factor for reading comprehension impairments. This is important, as the combination of these language difficulties over time could impact a child's ability to first to listen and communicate effectively in the classroom, as spoken language is the medium of instruction, and later to develop an understanding through written materials.

Although language acquisition is a very robust process, the rate of which children develop language is sensitive to the amount of input that they receive from adults around them. The most recent prevalence figures for preschool language difficulties fall between 7% and 14% depending on the age, thresholds adopted and the measures used (Law et al., 2017). This talk looks at a number of evidence-based interventions and focuses in particular on strategies that develop listening comprehension, vocabulary and narrative skills. Focusing on language and communication is especially important for young children and will support the development of a range of early literacy skills, their wider knowledge and understanding, and is also linked to other important outcomes including children's self-regulation, socio-emotional development, and reasoning.

This talk also focuses on interventions for adolescent poor comprehenders, and in particular the RCT that was carried out to examine the efficacy of text-based (TB) and oral language (OL) training for students aged 11 to 13 years with poor reading comprehension. The RCT measured the impact of the training on reading comprehension, vocabulary knowledge, value of reading and reading self-concept. Students were randomly allocated to a text-based, oral language or waiting list control group, and the parallel intervention programmes were delivered for an hour each week over a period of twelve weeks. Six months prior to the RCT, extensive piloting was carried out in order to allow the characteristics to be tested.

In the first component of the text-based programme, five metacognitive strategies were taught using the text: look back and re-read; think aloud; think in pictures and explain and reflect. In the second component, students completed an activity based on the principles of reciprocal teaching (Palincsar & Brown, 1984), and specifically the four reciprocal teaching strategies (clarification, summarization, question generation, and prediction).

The reciprocal teaching approach involves a gradual transfer of responsibility, by providing scaffolding, feedback and modelling of the strategies until the teacher was acting only as a facilitator to a student-led dialogue. The aim of this approach is to support students to develop their reading comprehension skills independently and generalise their skills to other contexts. In the third component, children learnt and performed interactive tasks related to the different inference types. Finally, students used a story mountain diagram alongside graphic organisers to help scaffold their understanding of different aspects of written narrative.

The oral language programme also comprised four components: vocabulary, reciprocal teaching with spoken language, figurative language, and spoken narrative. All teaching in this program involved working with spoken language. In the first component, new words were introduced via listening to a section of the chosen book. The selection of the words was determined using the Multiple Context Learning approach (Beck, McKeown, & Kucan 2002). This approach targets “tier 2 words” selected to be challenging, interesting, relevant, and applicable to a child’s life experiences. These words are often the glue that is needed for comprehension to occur.

Through careful support and structured discussion, pupils learn the meanings of new words, including their relationship to other words and metaphorical uses, practiced clarification strategies, and had the opportunity to form associations with known related words. In the third component, children explored figurative language through the analysis of the internal semantics of phrases, and the surrounding context to interpret the correct meaning of phrases. In the final component, children completed spoken narrative activities to help scaffold their understanding of how spoken narrative is structured.

Hierarchical linear models were used to analyse data to account for clustering at the school level. Analyses showed that there were statistically significant gains in reading comprehension for both the text-based and oral language intervention relative to the waiting list control. Both intervention groups also showed significant improvement in vocabulary knowledge, students’ value of reading and reading self-concept relative to the waiting list control.

This research demonstrates that multiple-component oral language and text based intervention programmes can boost reading comprehension and vocabulary standard scores. In doing so, this research added to the broader understanding of adolescent reading development.

Indeed, it is clear that a significant number of children are entering education with serious reading and oral language difficulties. It is vital that these children receive interventions that are highly targeted, relevant and tailored to their individual needs. This is important as language and literacy provides the children we teach with the building blocks, not just for academic success, but for fulfilling careers and rewarding lives.

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