



# Relay

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**Tried and Tested:**

Get into Shakespeare with the RSC



**Edublog Spotlight:**

The danger of learning styles



**Research Focus:**

Reading comprehension and knowledge

## Extra-curricular Provision

**This report from Education Policy Institute, published in February 2024, looks at provision of extra-curricular activities in secondary schools and explores which students are accessing provision, and their longer-term outcomes.**

They found that vulnerable students were less likely to attend both sports clubs and clubs for hobbies, arts and music, including pupils who were eligible for free school meals, with lower prior attainment, with poorer health, who were bullied and with SEND.

The report shows that pupils who participate in extra-curricular activities during secondary school are more likely to go on to higher education and employment, and have a higher engagement with sports into their early twenties. Not all pupils have equal access to a wide range of extra-curricular activities and the authors seek to further understand reasons for not participating,

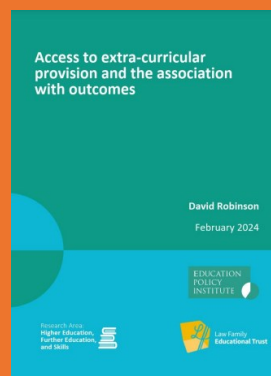
They discuss the impact of the pandemic, economic pressures and current concerns over attendance, and suggest 'if policymakers are serious about addressing the many inequalities of opportunities for young people, access to these activities should not be considered as a nice "extra" for those that can afford it, but an integral part of childhood for all.'

### Three Key Recommendations

**Benchmarks for extra-curricular provision**

**Support for schools to offer an extended day**

**Further research on long-term benefits**



<https://bit.ly/3TrP1jx>

# Influence of background knowledge on reading comprehension

**A critical review of research looking at the role of background knowledge in reading comprehension of primary-aged children, published in 2021, demonstrates the importance of systematic, sequenced knowledge within a curriculum (Smith, Snow, Serry and Hammond, 2021).**

Critical reviews are used to analyse, summarise and evaluate research in a particular area of focus. This review identified 23 studies that focused on links between background knowledge and reading comprehension of children aged between six and twelve, enrolled in formal mainstream education, taught in English. The decision not to include studies that targeted children with specialist provision or additional interventions was made to 'capture the effects of background knowledge on the range of students for whom an [...] atypical approach was not yet required.'

Reading comprehension is recognised as the ability to decode individual words, and the process of interpreting words and connected discourse (language comprehension). The review draws on the Construction-Integration model of reading which discusses the relationship between literal representation of text (textbase) and schema of background knowledge. A situation model is constructed when the mental schema related to the text being read are activated and used to make sense of the text. When readers lack knowledge, they construct a less effective situation model.

The review's findings show that the effects of background knowledge are influenced by the nature of the text, the quality of situation model created by the reader, and reader misconceptions about the text.

The paper draws on cognitive load theory to understand the process by which readers process information; 'for comprehension to occur, working memory must not be too heavily burdened.' Readers with low background knowledge, and less developed schema, find the process of integrating the textbase and their knowledge harder and more likely to overload their working memory. Equally, those who have low accessibility of knowledge require more effort to access relevant background knowledge which increases extrinsic load.

Another factor discussed is the role of the text itself, and the authors outline how cohesion and coherence of text - the level of explanatory detail, or use of linguistic devices such as headings or connectors, help readers to make sense of ideas.

Low-coherence texts require the reader to rely more on their background knowledge to make inferences, again, these additional demands place pressure on the working memory.

When it comes to measuring comprehension, the studies reviewed include a broad range of outcome measures, including free-recall, multiple choice questions, true or false statements and summarising, amongst others. This not only makes comparing studies more difficult, but also suggests there isn't a consensus over what 'comprehension' is. The authors state that despite this, there are key observations which are consistent across studies, and these form the basis of their discussion.

Readers with higher levels of background knowledge are better able to comprehend a text. There is also a compensatory effect whereby low-skilled readers with high background knowledge are able to comprehend a text more, and those with low background knowledge and higher reading skills are able to compensate for their lack of knowledge. The research does show that 'low-skill readers were not able to fully compensate for below average reading skill while inferencing' which highlights that high-knowledge is not enough.

The authors describe a 'reverse cohesion effect' whereby high-knowledge children, when faced with a more cohesive text, are less likely to actively process the text than those with low knowledge. Whilst the additional support can help the latter to comprehend what they are reading as novices, 'expert' learners benefit from reduced support.

Finally, the role of misconceptions is discussed. They state that schemata will hold information that varies in accuracy, and 'for young children, holding misconceptions is often the norm rather than the exception.' More 'competent' readers are likely to notice where text contradicts prior knowledge, where as low-skill readers, who are more reliant on their existing knowledge, are likely to replace what they are reading with their misconception.

The review offers implications for wider practice and the importance of both reading skill and background knowledge for comprehension. Whilst knowledge and cohesion of a text can compensate for lack of reading skill, this is only partial. Teachers should also be aware that high-knowledge readers will benefit from gaps in cohesion as it 'forces them to access background knowledge'. The review concludes that explicit teaching of systematic and sequenced background knowledge that ensures rich schemata, and careful selection of texts are the way to give children the best opportunities for learning.

*Smith, R., Snow, P., Serry, T. and Hammond, L., 2021. The role of background knowledge in reading comprehension: A critical review. Reading Psychology, 42(3), pp.214-240.*

# Edu-blog Spotlight

Paul Kirschner is Emeritus Professor of Educational Psychology at the Open Universiteit in Netherlands. He blogs at [3starlearningexperiences.wordpress.com](https://3starlearningexperiences.wordpress.com) tweets as [@P A Kirschner](https://twitter.com/P_A_Kirschner)



Learning styles do not exist, and Kirchner describes the myth that they do as 'both ineradicable and toxic' in this post outlining a recent study that shows 'learning styles are more toxic than we thought'. The study by Xin Sun and colleagues (2023) describes how parents', children's, and teachers' belief that a student has a particular learning style affects their perception of what they can achieve, their abilities and intelligence.

Kirschner describes the three experiments conducted by the authors. The first used vignettes of a visual learner and a kinesthetic learner, and asked participants to rate the intelligence and athletic ability of the learners. 'What they found was that both the children and the parents rated the visual learner as smarter than the hands-on learner. However, there was no difference in terms of the rating for sportsmanship.'

The second experiment forced participants to choose between the 'smart and sporty'. Both parents and teachers rated the 'visual learner as more intelligent than the kinesthetic hands-on learner and the hands-on learner as more athletic.' When asked "Do you believe that 'individuals learn best when they receive information in their preferred learning style (e.g., visual, auditory, kinesthetic)?", 85.1% of teachers and all the parents said they did, and when offered open-ended questions, parents and teachers believed different learning styles were associated with different academic strengths.

The final experiment asked teachers and parents to predict the grades that the students would receive in different subjects. Again, the visual learners were predicted to be better in 'core subjects like math, social studies, and language, while hands-on (kinesthetic) learners would get better grades in art, music, and physical education.'

The implications for thinking that a student has a particular learning style is the influence on predictions of abilities and potential, which may mean lower expectations, lower support, and fewer opportunities. Kirschner concludes, 'Although this is the first study of its kind, it does add to the evidence that the learning style myth must be rejected if we are to embrace the many possibilities of our students.'

Full post with link to original research: <https://bit.ly/3Tzshyi>

## Cognitive Bias of the Half-term

Cognitive biases are shortcuts in our thinking but they can make us lose objectivity. Each issue we introduce a new bias to help you avoid its pitfalls.

### *Ben Franklin effect*

This is a psychological phenomenon in which doing a favour for someone we initially see negatively can change our attitude towards them.

The phenomenon is named after Benjamin Franklin, one of the Founding Fathers of the United States of America, who wrote about the concept in his autobiography.

## Tried and Tested

**The Royal Shakespeare Company (RSC) has a wealth of resources available for teachers and learners from KS1 to GCSE and A level.**

There are a range of materials, lesson plans and ideas, with teacher packs and activity toolkits for pupils working independently. They offer resources on productions of Shakespeare plays and other, non-Shakespeare plays produced by the Company and you can search by play or learning stage.

The Shakespeare Learning Zone gives lots of information about Shakespeare's plays, with information for each play divided into four sections: Story, Characters, Language and Staging. Within these are three different levels/depths of information.

The RSC offers live lessons and live performances which schools can register to access.

<https://www.rsc.org.uk/learn/schools-and-teachers/teacher-resources>

