

# Book Review • Vision: The Forgotten Sense

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Reading is a complex task. Truly understanding the visual and neurological processes involved can give valuable insight into how to help children who are struggling to read. *Vision The Forgotten Sense* by Kenneth A. Lane, OD takes a comprehensive look at these processes, as well as suggests specific activities that can be practiced, all aimed at improving reading fluency and efficiency. This book is an extremely helpful guide not only for optometrists, optometry students, and vision therapists, but also teachers, occupational and physical therapists, and parents.

Chapter 1, *In the Blink of an Eye*, dives into the eye movements used when reading, and how these movements are directed and processed in the brain. Each specific eye movement is described in detail, allowing the reader to understand exactly what happens to our eyes during reading. The knowledge gained in this chapter sets the reader up well for the more complex discussions further on in the book.

Chapter 2, *Word Recognition*, continues with this idea by describing what happens after seeing the word – recognition and comprehension. It also discusses predictability in reading, and why sometimes children replace small words with other small words made up of the same letters. Another topic discussed in this chapter is phonological representation – the associations built between a child hearing or saying a word, and how that word looks and is spelled on paper.

Chapter 3, *Dyslexia*, provides an in-depth description of the various types of dyslexia, as well as testing methods and treatment options. Interestingly, the book suggests dyslexia is closely linked to attention, and shows data on various questions that were asked to dyslexic and non-dyslexic readers.

Chapter 4, *Attention*, fits the natural progression of this text as attention was touched on in the previous chapter. Attention is broken down into top-down and bottom-up, with this chapter mainly focusing on top-down. Top-down processing is stimulus-driven and goal-oriented. In short, top-down attention is what we choose to give our attention to – in reading, this is the words on the page rather than everything else

happening around us. With vision therapy, top-down attention can be improved which allows attention to better stay on the reading task rather than the distractions. In this chapter, the roles of attention involved in successful visual processing and reading are discussed, and multiple vision therapy activities are described that can help improve visual attention and therefore reading. Norms are also provided for expected attention spans in certain age groups.

The final chapter (chapter 5), *Attention Span*, continues with the idea from the previous chapter, but highlights visual and perceptual attention in reading. Training visual and perceptual attention with the activities listed in this chapter can greatly improve reading ability and even children's enjoyment of reading.

The over-arching theme and most important takeaway from this text is that reading is deeply reliant on properly functioning visual and perception processes, as well as attention. The author relates why this is true and describes many methods to improve these functions and therefore improve reading ability. One of the best things about this text (and most helpful for those less familiar with vision therapy), is that all of the above background is presented in the first 62 pages, and pages 63-193 are solely devoted to activities that can help with reading. Instructions are given for exactly the order in which to practice the categories, and how long to practice each day. The first category is spatial attention, followed by multi-object tracking, sustained attention, selective attention, visual attention span, visual search, and finally executive memory. Whether you are hoping to better assist children having difficulty learning to read in your office or are a parent trying to understand and aid your struggling child, this book is an invaluable resource. Not only will you feel better-educated on what causes visual-related learning problems, but you also will learn specific activities that can help. Reading to learn and reading for enjoyment are both possible for any child with the right tools – Dr. Lane is here to help!