

VISUAL ACTIVITIES TO IMPROVE CHILDREN'S READING PROFICIENCY

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#### Introduction

The activities in this program deal with children's visual systems. The visual system has long been ignored or ridiculed as a source for improving children's reading ability. After more than 30 years of working with children who were poor readers, I have seen the results of visual activities that increase children's reading speed and proficiency. This is significant because when children find out that they are faster at reading, they realize that reading is not drudgery, and they read more on their own. Once they are reading on their own, they are on their way to being better readers. And because they often equate reading speed with intelligence, their self-esteem improves.

Over the last four decades, many approaches to helping reading-disabled children have emerged. Despite all of these approaches, there has always been a small but dedicated group of optometrists from the Optometric Extension Program (OEP) and the College of Optometrists in Vision Development (COVD) who have seen success with vision therapy (VT) programs. Optometrists like myself who specialize in helping reading-disabled children are called developmental optometrists.

One of the things I noticed in those early years was that most of the children who benefited from vision training had similar symptoms. These include:

- 1. Slow reading
- 2. Excessive reversals of letters or words
- 3. Sloppy or disorganized printing
- 4. Making mistakes copying from the board or text
- 5. Losing their place or skipping words during reading

Reading is more complicated than most people think. It is not as easy as seeing a word and then finding that word stored in the brain. And learning to read is much more than learning phonics. It is beyond the scope of this book to explain all of the perceptual and neurological processes that are involved with reading; instead, this book was written to provide you with the tools to help children become more proficient and faster readers.

I have designed the activities in the workbooks to improve reading speed and proficiency by improving eye tracking (the ability to move one's eyes quickly across a line of print, which is what we do when we read), focused attention, visual scanning, and spatial attention. All the activities are based on scientific research. Like any other exercise program, children get the best results if they are dedicated to doing the activities. I suggest that children spend at least one hour a day for five days a week on these activities. This does not replace normal reading instruction and is only intended to supplement current reading activities. Children should have a professional eye examination performed by a developmental optometrist before starting this program. I also recommend that children have a visual evaluation by a member of the COVD or OEP.

There is no quick solution to reading difficulties. Beware of anyone who tells you that he or she can solve a child's reading problems with a quick fix! Children who have severe reading problems may always have some difficulty with reading, but the good news is that they can be helped.

The most important activity children can do is read. Have them read every day. You should also read to them and let them see you reading. Modeling a love of reading will help to instill it in children.

#### How This Program Is Organized

This book contains the Lane Academic Readiness Screen (LARS), a questionnaire that is designed to identify children who may be at risk for possible school difficulties because of reading or vision problems. This is primarily for children in kindergarten through second grade, but it could be useful for children in all grades. The questionnaire also is used to identify problems in directionality, laterality, gross motor skills, visual motor skills, simultaneous and sequential processing, eye tracking, and attention.

The workbooks provide school professionals and parents with activities that they can use to work with children to increase reading proficiency. This is accomplished through improved visual-spatial attention, visual focused attention, eye tracking, working memory, and reading speed.

# Screening Children for Potential School Problems Using the Lane Academic Readiness Screen (LARS)

You can check to see if children may be at risk for school difficulties because of vision problems by using the Lane Academic Readiness Screen (LARS). This instrument will also target specific developmental areas that may be deficient.

#### Developmental Areas Targeted by the LARS

- 1. **Directionality:** Understanding a letter's proper orientation, which is necessary to avoid reversal errors
- 2. **Laterality:** Understanding one's right and left, which is necessary to avoid letter and word reversals
- 3. **Sequencing:** Remembering information in consecutive order, which is needed for phonics
- 4. **Gross motor skills:** Control over the movements of the large muscle groups, including balance
- Ocular motor skills: The smooth, accurate, and effortless eye movements needed for efficient reading
- 6. Visual motor skills: Necessary for good printing and handwriting
- 7. **Simultaneous processing:** The ability to process many pieces of information at once, which is needed for comprehension and rapid word recognition
- 8. **Vision:** A visual examination may be necessary based on instrument results.
- 9. **Attentional difficulties:** Includes attention deficit disorders

#### Development of the LARS

One of the things that I noticed over several years of working with children is that those in the early grades who are struggling in school have similar symptoms. After interviewing hundreds of parents, I realized that parents of children in the lower percentiles of their class consistently answer questions concerning their children differently than parents of children in the top percentiles. It occurred to me that a questionnaire could be developed that could alert parents to the fact that their child may be at risk for having difficulty in school.

#### The Activities in the Workbooks

The workbooks contain activities that you can use for a child's therapy program. Before you begin working on an activity, first determine the child's reading speed (see below). The program is designed to last for four months, but you should begin to see improvement in the first month. Be sure to become familiar with the activities before you start working on them with the child.

## Determining the Child's Reading Speed

What is the child's reading speed? And what should it be? To determine the child's reading speed, find some reading material at the child's grade level, and only use 100 words of it. Have the child read the 100 words to himself, and record his time in seconds. Make sure that he is reading for comprehension by asking him questions. If he cannot answer 70% of your questions correctly, redo the exercise using material from a lower reading level. This will be the same reading level you will use to retest him in four months.

Now use this equation to find the child's reading speed: divide his time in seconds into 6,000. For example, if it took the child 60 seconds to read the passage, his reading speed would be 100 words minute (WPM). The following list shows the reading speeds that are considered normal for children in the various grade levels.

| Grade 1: 80-115 WPM  | Grade 7: 195-204 WPM  |
|----------------------|-----------------------|
| Grade 2: 115-138 WPM | Grade 8: 204-214 WPM  |
| Grade 3: 138-158 WPM | Grade 9: 214-224 WPM  |
| Grade 4: 158-173 WPM | Grade 10: 224-237 WPM |
| Grade 5: 173-185 WPM | Grade 11: 237-250 WPM |
| Grade 6: 185-195 WPM | Grade 12: 250-280 WPM |

### The Training Program

NOTE: Please remember that the LARS is a screening instrument and is not intended to replace a professional evaluation. If the LARS questionnaire indicated that the child is at risk for school difficulties due to reading or vision problems, he or she should have a professional eye examination by a member of the COVD (College of Optometrists in Vision Development) or OEP (Optometric Extension Program) before beginning this training program.

The training program is designed for a four-month time period on a five-day-a-week schedule. To keep the child's interest, do four or five activities per day for about 10 minutes each, totaling approximately one hour each day.

Be sure to record the child's reading speed before you start so that you can compare it to his speed at the end of the four months. It is also important that you write down your comments about how well the child performs each activity. These will help you decide which new activities to use.

The activities are not designed to replace the child's regular reading activities. They should only be used in addition to the normal reading that the child does.

Encourage the child to do his best. The more effort he makes, the better the results will be. If the child would like to practice the activities for more than five days a week or 60 minutes per day, that is fine.

Some of my therapy ideas were taken from the following sources:

- Barkley, R. A. (Ed.). (2006). Attention-Deficit Hyperactivity Disorder: A handbook for diagnosis and treatment. New York: Guilford Press.
- Cicerone, K. D. (2002). Remediation of working attention in mild traumatic brain injury. *Brain Injury*, *16*(3), 185-195.
- Phye, G. D., & Pickering, S. J. (Eds.). (2006). Working memory and education. Boston: Academic Press.
- Sohlberg, M. M., & Mateer, C. A. (2001). *Cognitive rehabilitation: An integrative neuropsychological approach*. New York: Guilford Press.
- Treisman, A. (1998). Feature binding, attention, and object perception. *The Royal Society, 353*(1373), 830-840, 1295-1306.
- Treisman, A., & Schmidt, H. (1982). Illusory conjunctions in the perception of objects. *Cognitive Psychology*, *14*(1), 107-141.