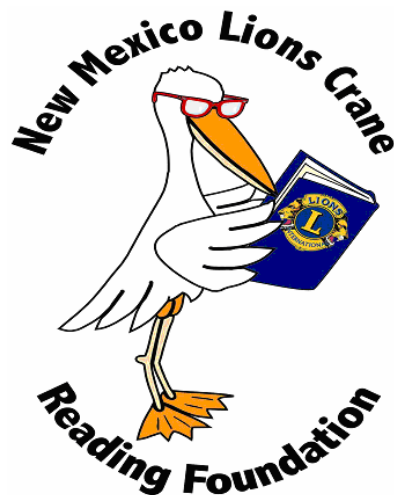


Lions Crane Reading Program

Lions Crane Literacy Program Handbook: Response to Intervention Made Easy

A Guide So Every Child Gets Ahead (No excuses)



By
Allen Crane, Virginia Crane,
Dr. Morton Davis OD, Dr. Bruce Wick OD



“We Serve”



.....

Lions Crane Reading Program

Lions Crane Literacy Program Handbook: Response to Intervention Made Easy



.....

By Allen and Virginia Crane, Dr. Morton
Davis OD, & Dr. Bruce Wick OD

A Guide So Every Child Gets Ahead (No Excuses)



"WE SERVE"

NM LIONS CRANE READING FOUNDATION

Lions Crane Literacy Program Handbook

© NM Lions Crane Reading Foundation
PO Box 2846 Las Cruces, NM 88004
Phone 505.373.0561

ISBN 0-9769882-0-9

1st Printing July 2007

Table of Contents

| | | | | | |
|-----------|--|----|--------------|---------------------------------------|-------|
| CHAPTER 1 | INTRODUCTION | 1 | APPENDIX I | Lions Davis Visual Efficiency Test | I-1 |
| | Background | 1 | APPENDIX II | Lions Copy Forms | II-1 |
| | What's Happening | 3 | APPENDIX III | Lions Spelling Words | III-1 |
| | Why Performance Based Testing | 4 | APPENDIX IV | Dolch Word List | IV-1 |
| | The Gateway To A Child's Mind | 5 | APPENDIX V | Symptom Based Prescribing | V-1 |
| | Orton-Gillingham Approach To Reading | 5 | APPENDIX VI | Forms | VI-1 |
| | NM Lions Crane Reading Program | 6 | | | |
| CHAPTER 2 | IDENTIFYING PROBLEMS | 9 | | | |
| | Visual Processing | 9 | | | |
| | Lions Davis Vision Efficiency Test | 9 | | | |
| | Math Copy Test | 11 | | | |
| | Lions Copy Forms | 11 | | | |
| | Lions Functional Vision Checklist | 13 | | | |
| | Lions Templates | 14 | | | |
| | Auditory Processing or Allergies | 14 | | | |
| | Lions Spelling Words | 16 | | | |
| | Lions Crane Auditory Processing -Allergy Checklist | 16 | | | |
| CHAPTER 3 | ENHANCING SKILLS | 19 | | | |
| | Information For Parents | 19 | | | |
| | What Parents Can Do About Allergies | 20 | | | |
| | Body Movement | 21 | | | |
| | Things To Do At Home | 21 | | | |
| | Focusing | 23 | | | |
| | Impress Method of Reading | 23 | | | |
| | Computer Programs | 23 | | | |
| | Information For Schools | 23 | | | |
| | Desk Height | 24 | | | |
| | Lions Templates | 24 | | | |
| | Body Movement | 25 | | | |
| | Performance Based Vision Testing | 25 | | | |
| | Performance Based Auditory Test | 25 | | | |
| | Computer Labs | 26 | | | |
| | Computer Programs | 26 | | | |
| | School Optometrist | 29 | | | |
| | Summary of Response to Intervention | 31 | | | |
| | What NM Lions Crane Reading Foundation Offers Schools | 32 | | | |
| | NM Lions Children's Eye Screening | 33 | | | |
| | In Conclusion - The Lions Crane Reading Program Works | 35 | | | |

Introduction

The goal of the New Mexico Lions Crane Reading Foundation (NMLCRF) is to help every child read and write proficiently. This ambitious goal can be accomplished easily, quickly and inexpensively.^{1 2} The New Mexico Lions, whose motto is “We Serve,” decided children needed help when it was brought to their attention:

1. Of the 19 industrialized nations, the US ranks 16th academically by the National Center on Education and the Economy.³
2. Our universities are no longer the best in the world.
3. The top students in our colleges are from Asia.⁴

Background

In order for our students, indeed our country, to compete with the rest of the world, we must give students the tools they need.

This guide is for parents, educators, and legislators to help EVERY CHILD GET AHEAD and reach his or her full potential as quickly as possible and thus able to compete with the rest of the world. If children can skip, do jumping jacks, or jump rope,⁵ you can have them well on their way to reading and writing proficiently in one semester.⁶ We are not expecting enough from our children.⁷

First we had No Child Left Behind and now we have Response to Intervention. The Response to Intervention process is to screen, teach, intervene, probe, chart and adjust. We really like RTI. There is no mention of handicapping condition and IQ. You just find out what the student knows and start teaching at that point. Tier 1 students are the top students and Tier 3 students the slower students.

This book offers two options for RTI testing a whole class of students quickly and efficiently, in only one half day. The first option is testing all the students in the class at one time in a computer lab. The computer⁸ does everything: identifies the students' needs, places them in appropriate programs, evaluates every response and retests. The

second option is paper and pencil tests given by the teacher to the whole class, simultaneously. The paper and pencil tests are simple to give and easily interpreted, providing the information the teacher needs to meet the students' needs. Both methods may be used to be sure no one slips through the cracks. This hassle free evaluation is the first step in putting the fun back into teaching and learning.

This research based supplemental program is very teacher friendly. Teachers no longer have to spend so much of their valuable time testing. Teachers teach and computers furnish the drill, accountability, and most of the testing and paperwork for teachers' Response to Intervention in only minutes of classroom time. Students enjoy school. It puts the fun back into teaching and learning. Tier 1, Tier 2 and Tier 3 students receive appropriate computer placement. Lions Performance Based Testing identifies students who need additional help with visual or auditory processing to help ALL students reach their full potential as quickly as possible. We do not have to wait for them to mature.

Reading Analysis and Prescription System⁹ (RAPS) automatically tests and diagnoses a full classroom of students and groups them for intervention in ten to forty minutes. RAPS is 100% computer based and provides lesson plans and prescription for each student or the entire class. Teachers do not have to spend weeks testing. Mindplay's new UARC program allows other publishers to plug their computer programs in, free, so students can be automatically enrolled in the appropriate computer programs used by the school.

New Mexico Lions Crane Reading Foundation will be offering workshops for certification in the New Mexico Lions Crane Reading Program the second Friday and Saturday of each month at the Dream Center¹⁰ in Las Cruces, New Mexico. Administrators, teachers, aides, parents, tutors, and volunteers thoroughly grounded in the NMLCRF approach can expect spectacular results: 98% of first graders reading and writing efficiently and gains of one to five years in reading per semester for special education high school students.^{11 12} My Reading Coach guarantees that every student will learn to read.¹³

The NMLCRP is based on thirty years' research into programs that move students from the bottom group into the top group. The NMLCRP is a compilation of the best methods and programs we have encountered for meeting each student's needs. Many of these methods have been in use for over fifty years. It is the combination of these methods and the use of computers that is important in meeting each student's needs. The children's needs are established when the teacher gives the whole class performance based vision and auditory processing tests in about 30 minutes of classroom time and/or about forty minutes computer testing time for RAPS. RAPS 360 automatically tests and diagnoses a full classroom of students and groups them for intervention into the appropriate program. We do not have to wait for a child to mature. We can enhance their visual and auditory skills and get their brains ready to learn.

The first programs we found that moved students from the bottom to top group were a combination of SRA's Corrective Reading¹⁴ and Learning 100 (now Reading Plus.) Fourth and Fifth graders who had completed 120 stories in SRA Corrective Reading could read most words and stories at grade level but were still not competitive in the classroom. These students were placed in Learning 100, a filmstrip program with a moving slot which forced students to read silently faster and faster. When they could read over 200 words per minute with good comprehension, those students moved to the top group. When they graduated, many were in the National Honor Society. We later documented three to seven years' gain in reading efficiency after 12 sessions of Reading Plus, the computer version of Learning 100.¹⁵ Students had fewer and quicker eye stops when reading a story and read at a faster rate with better comprehension. The Visagraph (by Taylor and Associates, Reading Plus.com) has four infrared sensors which record eye movement as a student reads. We select a story in which the student knows all the words.

The first computerized Orton-Gillingham¹⁶ oriented class we tested was at Rusk Elementary in Midland, Texas. Students had been in Lexia thirty minutes a day five days a week for four months. This second grade class had three students who read about 400 words per minute with good comprehension. All three of these second graders scored at the 12th grade level on the TerraNova¹⁷ achievement test. The class average was 6.1¹⁸ grade level. We can do better than this. The combination of an Orton-Gillingham computer program and Brain Gym, a body movement program at Rusk Elementary made those gains possible.¹⁹

We have visited New Vision School, a charter school, in Minneapolis, MN, three times over fifteen years. They work with the Minneapolis school system and do a body movement program, "Boost Up,"²⁰ with any student at risk of being retained in kindergarten. These students are not retained and in the third grade are in the 83rd to 89th percentile academic group. Body movement programs the brain, getting it ready to learn and moves students from the bottom to the top group. This school has been doing this for over ten years. Minnesota Education Department and US Department of Education are funding workshops to implement this program around the country.

What's Happening?

Television, the best baby sitter ever invented, has caused major educational problems. While watching TV the eyes do not have to move, change focus or converge, all necessary skills to be successful in school. Children spend more time watching TV than they spend in school. The first day of school is usually the first day a child is required to converge (aim in) his eyes for a prolonged period of time or move his eyes across the page. The vision skills of these children can be quickly enhanced, raising their likelihood of academic success and raising their self-esteem.²¹

While watching TV the brain is nearly hibernating and functioning about like a bucket of “mush.” Body movement programs the brain, getting it ready to learn. Schools can give students the physical exercise and body movement they lack by letting them walk to school and providing PE, recesses, and/or the five minute Lion exercise tape activity²² as a break between reading and math periods. Having every student in middle school and high school in ROTC²³ would be a great help. Crossing the midline of the body during physical activities forces both sides of the brain to work together as a team. Instead of being right or left brained, children can be whole brained. Asian countries have daily body movement activities for their students. Add to the TV situation all the junk food, food additives and pollution, and it is obvious why many of our children are experiencing allergies, are overweight, and their brains not ready to learn.

In Asia they are not trying to teach every child. Their school day is longer. Their school year is longer for their top students. How do we compete - have our students read faster and take in more information. We can have second graders reading at least 200 to 300 words per minute with good comprehension. Some will read over 400 words per minute with good comprehension. Think how much information they can learn reading 400 words per minute in the second grade instead of 80 to 120 words per minute. Above all, students can have fun reading.

Why Performance Based Testing?

How a child performs visually and auditorily while doing academic tasks in the classroom reflects the child’s needs. RAPS is a computerized performance based academic test. It identifies exactly which skills a student needs and groups students accordingly. If computers are not available and schools want to be sure no one slips through the cracks, Lion’s paper and pencil performance based vision and auditory processing tests can be given to a whole class by the classroom teacher in thirty minutes. The Lions performance based tests are fast, efficient, and free. Teachers do not have to wait months for a child to be tested and the tests scored. The Lions Davis Visual Efficiency Test²⁴ in one minute will indicate if a student needs vision help with glasses or eye teaming. Lions Spelling Words²⁵ (about twenty minutes) given to a whole class indicates which children have an auditory processing problem that is probably caused by allergies. The Lions Copy Forms takes five minutes and indicates which students have a scanning or visual perception problem. Copying math problems from an overhead or chalkboard identifies students with an accommodation (focusing) problem. Any and all of these problems can be well on their way to being remediated in one semester in a regular classroom by the classroom teacher using the programs described in this book.

The Gateway To a Child's Mind

Most of what is learned in school (80 to 90%) is through the eyes. Vision screenings in schools should be outlawed if all they use is the Snellen Chart.²⁶ Recent research by ophthalmology shows when the Snellen Chart is administered by specially trained optometrists or pediatric ophthalmologists it misses 30% of the severe problems, amblyopia (the leading cause of blindness) and strabismus.²⁷ This is not counting simple problems like convergence insufficiency, eye movement, and focusing problems that interfere with learning. The Snellen Chart misses all of these. Recent research shows about 85% of the students have a vision problem when eye movement is included.²⁸ Even when eye exams and glasses are free, most parents still do not make an appointment.²⁹ The Snellen Chart qualifies the student to hunt buffalo if the buffalo stands in dead grass at twenty feet and does not move. When the school nurse tells parents the child has 20/20 or 20/30 at twenty feet, parents think the child has had a full eye exam. The nurse tells them it is just a screening. Parents just do not hear it that way. Children must be able to aim, move and focus their eyes and see clearly at 10 to 14 inches to be successful in school. Just because a child can see at 20 feet does not mean he or she can see at 14 inches. This is the distance most learning takes place. Native Americans and Hispanics have five times the astigmatism Anglos have.^{30 31} This means parts of letters will be missing. This fact could help explain the high dropout rate of Hispanics.

Orton-Gillingham Approach to Reading

Allen and Virginia Crane were certified in the Orton-Gillingham multisensory approach as trainers by Arlene Sunday in 1972. It works. Orton-Gillingham multisensory approach meets all the No Child Left Behind and National Reading Panel requirements. There are over a hundred variations of the Orton-Gillingham approach. We have used an Orton-Gillingham approach for over thirty-five years. We are still using Orton-Gillingham methods, only now we use computerized versions. Both Lexia and My Reading Coach are based on the Orton-Gillingham multisensory approach which produces faster, better results for less money with accountability built into the program.³² Pre-and post-testing with a Visagraph³³ shows that while these computer programs teach the academic skills they are also training the eyes to work together as a team. The Visagraph shows fewer fixations (eye stops) for shorter duration with fewer regressions (looking back). Pre- and post-Visagraph tests are great tools to document problems, efficient reading gains, and what reading programs are working and not working.

Why Computers Work

Students using computers do not have to converge their eyes (aim in) as much as when they read from a book. If you look at children in a computer lab, most are 18 to 28 inches from the screen.

The computer programs have larger letters and words than books and present them on a colored background with only a few large letters or words on the screen at one time.

Children often respond twenty to thirty times a minute. That is a lot of eye movement and fixating (looking) practice. All documented.

Students work at their own rate and on the appropriate skills.

Every response is timed, graded, and documented for accountability. If students miss twice on any activity, they branch off and master that skill before proceeding. Computers tell when offline instruction is needed.

Instructions and directions can be in English or Spanish, but the student works in English.

Every student can have a master teacher, repeating instructions as many times as necessary in English or Spanish for the skills the student needs.

The computer can say, “That’s not quite right.” This does not shatter the student’s self-image or even cause ego discomfort.

A Fluency Program using a moving window forces students to read faster than they are able to talk while keeping their comprehension high.

New Mexico Lions Crane Reading Program

Each activity raises the educational bar. Add them as you can. This research-based supplemental reading plan includes:

1. Sensory RAPS testing of whole class in 10 to 40 minutes and/or
2. Performance based vision and auditory processing testing
3. Full vision exams at school³⁴
4. Fine and gross motor skill development³⁵
 - a. Lions exercise tape -Tier 1-Tier 3.
 - b. Bal-A-Vis-X –Tier 1-Tier 3
5. Computer programs
 - a. Orton-Gillingham based
 - i. Lexia –Tier 2 (Supplemental)
 - ii. My Reading Coach-Tier 3 (Intensive Intervention)
 - b. Fluency programs
 - i. Fluent Reading Trainer Tier I (Enhancement)
 - ii. Reading Plus-Tier I (Enhancement)

These computer programs enhance vision skills while the child is practicing phonics, spelling, comprehension, reading fluency and writing. Computer programs automatically do necessary retesting. Reports show achievement, when they need help, and length of time on each activity.

¹ Crane, A. Crane V., Reading Problems Resolved, P.O. Box 2846, Las Cruces, NM, 88004, 2006

² National Reading Panel, Small Group instruction using Orton-Gillingham cost ranged from \$1,600 to \$1,000 per student depending on how much supervision is necessary and time training takes. Lexia testified it cost less than \$10 per child and training takes one day. My Reading Coach guarantees reading success in 50 to 60 hours or your money back. Over a three-year period My Reading Coach would cost about \$60 to teach a student to read.

³ Bloomberg, M.R., Flabby, Inefficient, Outdated, The Wall Street Journal, December 14, 2006.

⁴ Ask any graduate professor or student.

⁵ This is our way of qualifying IQ. While IQ is a factor, IQ is not in granite. IQ can be improved in many cases 40 points with Lexia's Cross Trainer or treating or "fixing" allergies as in Fighting For Tony by Mary Callahan, New York, NY, Simon & Schuster, 1987. Tony's IQ went up 100 points by eliminating milk.

⁶ Crane, A. Crane V., Reading Problems Resolved, P.O. Box 2846, Las Cruces, NM, 88004, 2006.

⁷ Rusk Elementary School. in Midland, Texas. We Visagraphed a second grade class that had been in Lexia 30 minutes a day five days a week for four months. Three students read about 400 words per minute and all three scored at the 12th grade level on the TerraNova. If three out of 21 students scored this well, why didn't the other 18? We went back to Rusk Elementary and gave a 19 question Functional Vision Checklist. All students who had at least seven visual symptoms scored in the bottom third of the class on the TerraNova. Optometry can eliminate visual symptoms.

⁸ Mindplay's new RAPS 360 Reading Analysis and Prescription System automatically tests and diagnoses a full classroom of students and groups them for intervention into the areas of vocabulary, eye tracking (fluency), and encoding. RAPS is 100% computer based and provides lesson plans and prescription for each student or the entire class. Mindplay's new UARC program allows other publishers to plug their computer programs into UARC free and those students will be automatically enrolled into the right program using RAPS 360 analysis and prescription for intervention.

⁹ Mindplay.com

¹⁰ Dream Center, 1402 North Sixth Street, Las Cruces, NM. (505-527-1003)

¹¹ Crane, A. Crane V., Reading Problems Resolved, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006

¹² Lions Crane Reading Program Video, 2004: Valley View 73 out of 75 first graders wrote and read proficiently on the Dibels test and Alamogordo High School Special Ed students gained one to three years per semester (the next year they gained one to five years with eight out of 53 reading 750 words per minute near grade level with good comprehension.

¹³ Mind Play guarantees My Reading Coach will improve your students reading comprehension scores 10-30 percentile points after 50 hours of use or your money back.

¹⁴ Corrective Reading works because it is teaching reading from a distance (students do not have to converge their eyes as much) and students are responding 30 to 40 times a minute. This is a lot of fixating. This approach is recommended for use with any reading series. Teachers make a list of words and new phonic sounds in a story and puts them on the chalkboard or overhead. Then the teachers points to the word and says, "What word?" points again and the groups responds. Do the same thing with sounds.

¹⁵ Study was done at Fort Collins High School. Ten students were tested and gains ranged from 7.7 years to 3.5 years in reading efficiently. They read the same grade level stories more efficiently.

¹⁶ Allen and Virginia Crane were certified in the Orton-Gillingham multisensory approach as trainers by Arlene Sunday in 1972.

¹⁷ TerraNova is an achievement test used in many states.

¹⁸ Second graders scored as Sixth year first month grade level on this achievement test.

- ¹⁹ You do not get this good of gains if you do not have a good gross motor program.
- ²⁰ SMART Curriculum Guide, Minnesota learning Resource Center, 1800 Second St. NE, Minneapolis, MN 55418.
- ²¹ Crane, A. Crane V., Reading Problems Resolved, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006.
- ²² Lions have been using a five minute tape that is over thirty years old they are adding new music and activities.
- ²³ Students in ROTC do not dropout of school or join gangs. They tend to continue their education. Marching is body movement getting the brain ready to learn.
- ²⁴ The Lions Davis Vision Efficiency Test was originally developed in 1972 as the Davis Visual Scan Test by Dr. Morton Davis OD and was used in many optometrist offices one on one.
- ²⁵ The Lions Spelling Words are from the Crane-Wick Vision and Hearing Efficiency Test developed in 1987 using Dr. Elana Boder's concept of diagnosing dyslexics by reading and spelling patterns into visual dyslexics and auditory dyslexics. Visual dyslexics usually have a vision problem which shows up on the LDVET. Auditory dyslexia, which is usually caused by allergies, shows up on the spelling test.
- ²⁶ The Snellen Chart was designed for the army over 150 years ago to determine who would be cooks and who would be sharpshooters.
- ²⁷ The Vision in Preschool Study Group. Comparison of preschool vision screening tests as administered by licensed eye care professionals in the vision in preschoolers study. *Ophthalmol* 2004;111:637-50
- ²⁸ Orfield, O., Basa, F., Yun, Y., Vision Problems of Children In Poverty in an Urban School, *JOVD*, 2001, Volume 32
- ²⁹ Orfield, O., Basa, F., Yun, Y., Vision Problems of Children In Poverty in an Urban School, *JOVD*, 2001, Volume 32 Orfield, O., Basa, F., Yun, Y., Vision Problems of Children In Poverty in an Urban School, *JOVD*, 2001, Volume 32
- ³⁰ Miller JM, Dobson v, Harvey EM, and Sherrill DL, Comparison of preschool vision screening methods in a population with a high prevalence of astigmatism.
- ³¹ Maples WC, A Comparison of Visual Abilities, Race and Socio-Economic Factor as Predictors of Academic Achievement, *J Behav Opt* Volume 12 2001/Number 3
- ³² In a computer lab, every response is graded and recorded and a student has immediate feedback with no threat from the computer. In a small group there are few responses, responses usually are not recorded and it is very threatening to respond in a group with others listening. A teacher in a computer lab can supervise 25 students very easily with every response graded and recorded and remediation is provided. Teachers and parents know exactly how long students were in the program and which activities took the longest to complete. The total cost of the software for all three computer programs per child (for a 25 computer lab) is less than \$100 per student. The gains at Alamogordo High School computer labs were one to five years in one semester with eight out of fifty-three special education students reading near grade level stories 750 words per minute with good comprehension the second year in the program. The traditional Orton-Gillingham class on IEPs did not produce one student who made two years gain in one year. My Reading Coach guarantees a child will learn to read in 50 hours. My Reading Coach costs less than \$60 to teach a student to read. My Reading Coach works well with ELL, ESL, dyslexic, LD, first grade or adult.
- ³³ Visagraph by Taylor and Associates, Reading Plus.com, has four infrared sensors which record eye movement as a student reads. We select a story in which the student knows all the words. If the student has an eye teaming problem it shows up on Simulation as a ball bouncing all over the line of print. The student's eyes often stop 400 or 500 times to read 70 words. The eyes are trying to send the same picture to the brain. The computer reading programs furnish good big targets and the problem is often solved in about 20 hours on the Orton-Gillingham or the fluency computer programs.
- ³⁴ Wick, B., Symptom Based Prescribing, Reading Problems Resolved, P.O. Box 2846, Las Cruces, NM, 88004, 2006
- ³⁵ Hubert, Bill, Bal-A-Vis-X, Bal-A-Vis-X, Inc. 7412 West Tenth Street N, Wichita, KS 67212, 2001

Identifying Problems

To identify sensory problems give the Lions-Davis Vision Efficiency Test¹ (one minute) and Lion's Spelling Words (twenty minutes) to a whole class. To identify focusing problems give the math copy test. Then follow up with the Vision¹ and Allergy Checklists to verify the severity of the problem. If we correct these problems, our students can learn faster and better and compete with the rest of the world.

These tests are real eye-openers for educators and parents and pave the way to remedying problems. Giving the two tests followed by the vision and auditory checklists assures that very few students will fall through the cracks. From the results, educators and other professionals will know how to help the child. Once the vision and allergy stumbling-blocks are eliminated you can raise your expectations for student achievement. Children from kindergarten through high school² or even college can be helped. The NMLCRF program works equally well for gifted, learning disabled, ADHD, ADD, or dyslexic children since students work at their own level and rate. Many adults need this help; you do not outgrow the problems.

Visual Processing – The Gateway To The Brain

To excel in the classroom, a child must be able to see clearly and aim, move, and focus his eyes. If these skills do not work properly, the gate will not open. While the child will not outgrow the problems, they can be remediated in Head Start, kindergarten or as senior citizens in a few weeks. It is never too late, but the sooner problems are overcome, the better.

Lions-Davis Vision Efficiency Test

The Lions-Davis Vision Efficiency Test is used to measure the developmental level of a person's vision skills. Results are compared with the expected score for the person's age. This test has been validated from age 5 up. It only takes one minute to test a whole class and the New Mexico Lions Clubs and Dr. Morton Davis offers it free for parents or

schools to use. NM Lions hope to help both children and adults read comfortably through this research-based program. A person who reads comfortably will read more, with higher academic success, and be ready to meet the challenges of the world.

Giving the Lions-Davis Vision Efficiency Test. The Lions-Davis Vision Efficiency Test (See Appendix I) contains random letters, symbols, and figures printed on an 8 ½” x 11” piece of paper. Interposed with the random figures are 66 “Os”, which are also randomly placed. Students are asked to draw a line between Os connecting as many Os as they can in one minute.

Teacher directions:

1. Make sure students being tested are seated at comfortable desks that are also the correct height. When students place their thumbs under their chin, their elbows should just clear the top of the desk. The distance from eyes to the desk should be equal to the distance between elbow and the knuckle on the middle finger.
2. Say, “Today we are going to practice taking a test (hand out copies of the Practice Sheet on page I-2) to see how your eyes are working together. Write your name on the top of the page.” Pause. Say, “There are six Os on this page. I want you to draw a line through the first O you see and without picking up your pencil, draw a line through the next O and keep drawing the line until you have connected all the Os.”
3. Check the papers to be sure everyone did the activity correctly before doing the real test.
4. Copy and hand out the Lions Davis Vision Efficiency Test (page I-3).
5. Say, “Before you is a sheet of paper. On the other side of the sheet are letters, numbers and symbols. You are going to connect as many Os as we can in one minute. We have made it harder by trying to hide the Os with shapes, numbers and letters. When I say ‘go,’ turn your sheet over and draw a line through the first O you see and, without picking up you pencil, draw a line connecting as many Os as you can in one minute.”
6. “Do not start until you are told to start and be sure to stop when I say, Stop.” Set the timer for one minute. Have a list of the students in your hand and put a check mark by those who get close (less than the distance from their knuckle to elbow) to their work. These students automatically need to be referred. They usually get close so they can suppress the vision in one eye or they have an acuity problem at 14 inches.
7. “Any questions?” Pause. “Get set. Go.” Time students for 1 minute and say, “Stop.”
8. “Write your name at the top of the page. Count the number of Os you connected. Write that number by your name.”

Scoring The Test. Scoring begins by counting the number of Os the students connected. Most normal 5-year-olds will connect 20. Generally children will be able to connect an additional three each year. The 6-year-old will connect 23 and a 7-year-old will connect 26. This continues until the child reaches 15 years of age when the efficiency plateaus at 50 for the average person.

Divide the number of connected Os by the expected score to calculate percent vision efficiency. Any score below 80% efficiency should be referred to an optometrist and enhancement activities started. Those getting close to their work should be given the Stereo Fly Test, a standard optometric test for depth perception. The two eyes must work together to pass this test.

Expected values for each age group of children taking the Lions-Davis Vision Efficiency Test

| AGE GROUP | EXPECTED COUNT | REFER 70% EFFICIENT | REFER 80% EFFICIENT |
|--------------------|----------------|---------------------|---------------------|
| 5 years | 20 | 14 | 16 |
| 6 years | 23 | 16 | 18 |
| 7 years | 26 | 18 | 21 |
| 8 years | 29 | 20 | 23 |
| 9 years | 32 | 22 | 26 |
| 10 years | 35 | 25 | 28 |
| 11 years | 38 | 27 | 30 |
| 12 years | 41 | 29 | 33 |
| 13 years | 44 | 31 | 35 |
| 14 years | 47 | 33 | 38 |
| 15 years and older | 50 | 35 | 40 |

Math Copy Test

Have students copy ten math problems or spelling words (their next day's assignment) from the chalkboard or overhead. (Math is probably better.) Have students put their papers on the teachers desks as they finish and go on out to recess. The last ones through have a vision problem, probably due to focusing.

Lions Copy Forms^{3 4}

The Lions Copy Forms test is valid for kindergarten through 12th grade. The first day of school is usually the first time children have to converge their eyes for a prolonged period of time. Since kids haven't had to converge their eyes to look at small details (letters or numbers) before, they do not know how. Lions Copy Forms identify students needing help with scanning and vision perception problems. Lions Club templates are one of the best tools for weaning children off TV and getting their eyes ready to read.

The Lions Copy Forms test identifies visual perception problems which interfere with academic success. These children need template training. The Lions Copy Forms (See

Appendix II) may be reproduced. A child of three should be able to perceive and reproduce a circle accurately. A child of four should be able to perceive and reproduce a square. A child of seven should reproduce a diamond without difficulty. The reason for this skill is obvious. Letters and numbers are made of various combinations of shapes in a variety of positions.⁵

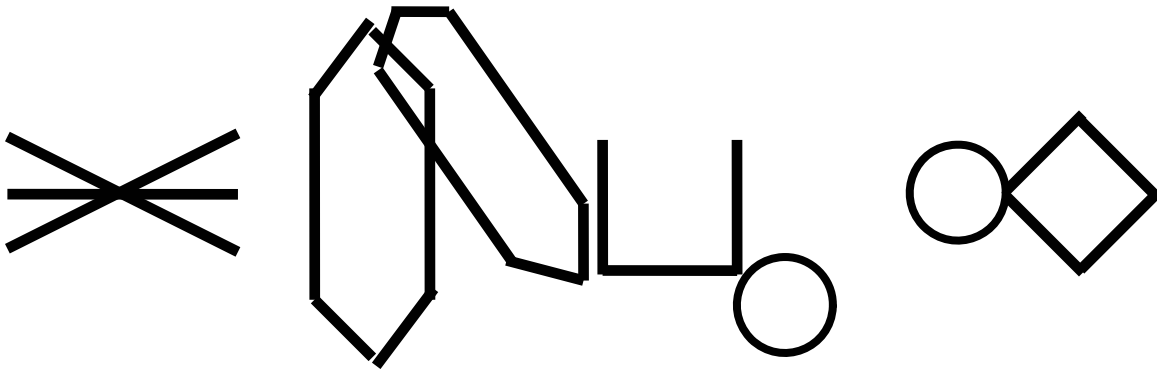
It takes five minutes to test a whole class for visual perception problems and about eighteen 15-minute training sessions to remediate these problems using the template program developed by the Lions Club in Winter Haven, Florida.⁶ The Lions Club in Winter Haven Florida had 25 years of research with five PhDs developing and documenting this program. These problems are the same ones diagnosed by the occupational therapist on the Visual Motor Integration Test (VMI.)

Templates are a fun, easy, effective solution to these problems helping students read, write, and spell.

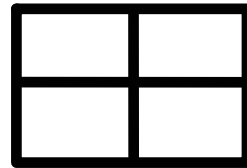
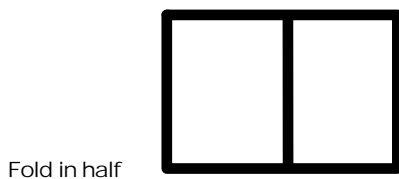
Correct pencil grip needs to be taught from the very first. It is much easier to teach the correct grip while using pencil grips. We use pencil grips from classroomdirect.com, 1-800-599-3040, Stetro 97-ST100 JRM approximately \$19.49 for 100 grips.

Directions - Lions Copy Forms. To do this test, desk height must be correct. With thumbs under the chin, the elbows should just clear the top of the desk. Follow the steps below:

1. Show the pictures quickly, explaining students are going to copy these pictures. (See Forms in Appendix II)



2. Have students fold a piece of 8 X 11 white paper in half and in half again



Fold in half again

3. Have them unfold their paper and write their name and date at the top of the paper. Tell them to use each section of the paper for a different drawing.
4. Hold up each picture one at a time while the children copy each shape in one of the sections.
5. Collect the papers. Separate the pictures into two stacks “Needs Help” and “OK.” You need not grade the drawings.

Students who need help receive template training. Though you do not grade the pictures, you may recognize some of the problems as distortion of shape, rotation, and integration. Templates usually correct these problems in about eighteen 15-minute sessions.

Students who have a “hard time learning the alphabet,” “poor spellers” or children who “guess at words” at any age usually have a scanning problem and do not know how to look at letters and words. It usually takes seven to ten 15- minute template sessions doing Template Activity Number One to remedy scanning problems. Templates may be ordered from NMLCRF, Box 2846, Las Cruces NM 88004.

Lions Functional Vision Checklist

The Lions Functional Vision Checklist (LFVC) has proven extremely useful in helping students, parents, teachers, and vision specialists communicate about how a child’s eyes are working together. Many students think seeing double, seeing words wiggle or float, and getting a headache every time they read is normal. After all, the school nurse has probably told the student he/she has 20/20 acuity. Among several thousand students who have completed the LFVC, percentages of students reporting problems remains nearly constant from school to school and from classroom to classroom.

Students who report “occasionally” or “always” on any question need to be referred to an optometrist. Their eyes are fighting with each other causing these symptoms. It could be acuity, eye teaming, or an alignment problem.

Lions Crane Functional Vision Checklist

| <i>To be filled out by student and parents.</i> | | | | |
|--|--------------|---------------|---------------------|---------------|
| Vision Screening | Never | Seldom | Occasionally | Always |
| 1. Headaches after reading or writing? | | | | |
| 2. Words run together, wiggle or you see double? | | | | |
| 3. Burning, itching or watery eyes? | | | | |
| 4. Slow copying from board? | | | | |
| 5. Reading and writing too close? | | | | |
| 6. Use a finger to keep place? | | | | |
| 7. Tilts head? | | | | |
| 8. Words appear blurry? | | | | |
| Total | | | | |
| | | | | |

Lions Templates

Students use tactile, visual and auditory skills together while going around each figure ten times with a pencil in a counter-clockwise direction with a counting rhythm. Students take the template up and trace each figure they have made, five times in a counter-clockwise direction with a light colored crayon. They then turn the paper over and make a star, snowman, robot, rocket, bird, etc., using the template. After initial guidance, let the children's imaginations flow. Fifteen minutes a day for six weeks remediates many visual perception problems, trains visual skills and improves visual concentration. Six weeks of templates, body movement, and computer phonics lead to beautiful handwriting.⁷

Auditory Processing or Allergies⁸

The most extreme example of the effects of allergies on a child can be found in *Fighting For Tony*. Tony's constant screaming was very stressful for his parents, one of whom was a nurse. Tony's team of experts examining his case consisted of a child development specialist, a speech and language therapist, a physical therapist, and a pediatrician. These experts diagnosed him for three years in a row as autistic and severely mentally retarded and reported it was doubtful Tony would ever talk. They asked the parents to consider placing Tony in an institution because someone would always have to take care of him. Tony turned out to have an IQ of 150. An undetected, severe allergy to milk had so affected his brain that he had been totally unable to progress through normal early-childhood development. Tony's problems were solved when his mother took him off all dairy products. His little sister then helped him to experience the developmental stages with her.

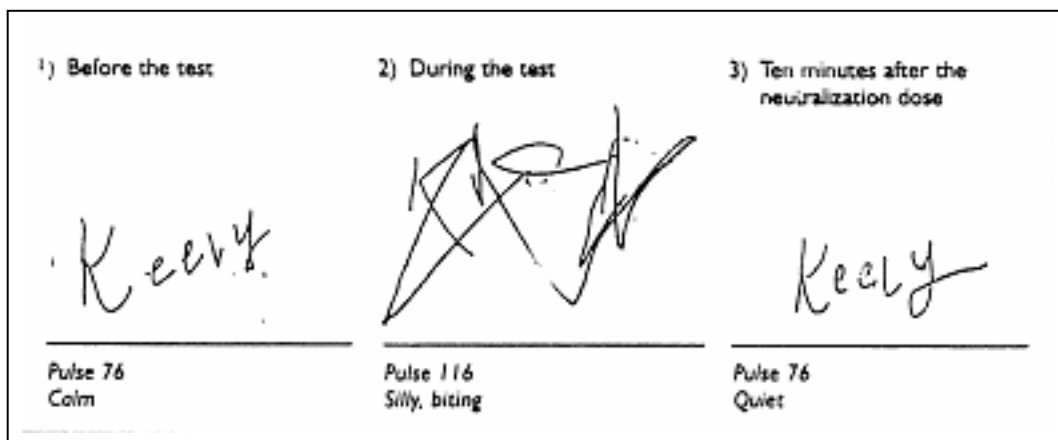
Dr. Doris Rapp's book, *Is This Your Child's World?*, shows thirty pages of handwriting and drawing examples (see below). After Dr. Rapp gives the child an allergen, the pulse rate goes up, behavior and handwriting deteriorate, and often reversals begin if the child is allergic to the substance. She gives the child an antidote, and the child returns to normal after treatment.

In her book *Our Toxic World*, Dr. Rapp says, "Each person responds to allergies or chemical sensitivities in his/her own way though each follows an individualized, characteristic pattern. You can sometimes find answers that everyone else has missed for years by paying attention to when and why, you or someone you love, suddenly changes." Dr. Rapp presents fast, inexpensive ways to identify and treat the source of a child's allergies or chemical sensitivities.

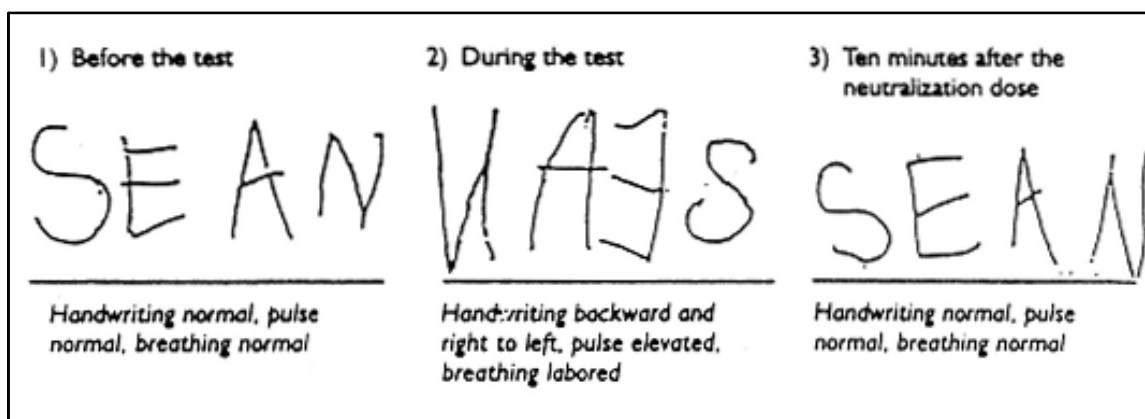
Effects from a true food allergy typically show up in 15 minutes to an hour after the food is consumed. Some food reactions such as bed wetting, ear infections, and abdominal complaints may occur six to eighteen hours later.

According to the Food Allergy and Anaphylaxis Network, the eight foods that account for 90% of all allergic reactions in the United States are: milk, eggs, peanuts, tree nuts (walnuts,

almonds, cashews, pistachios, pecans, etc.) wheat, soy, fish, shellfish. Dr. William Crook MD a noted allergist has an elimination diet that if parents tried, most knew what was causing the ADHD before the first appointment. It consisted of leaving out milk, tea, coffee, Kool-Aid, soft drinks, egg, peas, beans, corn, processed foods, sugar, wheat, peanuts, chocolate, food colors, and dyes. These foods are eliminated for two weeks then added back one at a time to watch the reaction to each food.



Example of the reaction to a food coloring allergen.



Example of the reaction to a mold allergen.

Students with severe auditory processing or allergies will be in Tier 3 group. Students with allergies often leave out obvious sounds while spelling.⁹ These students have an auditory processing problem probably due to their allergies. They often reverse letters such as b-d and h-y.¹⁰ Any student who is so loud it hurts your ears, probably has allergies. The loud student does not know he is loud. His Eustachian tube is plugged interfering with hearing and auditory processing. Some students experience good days and bad days with their spelling, math facts and/or handwriting.¹¹ The information is in their brain but allergies shut down the filing system on the bad days. Giving the Lions Spelling Words to a whole class tells the teacher which students have allergies interfering

with learning. These students leave out obvious sounds in words and reverse letters. Help is on its way.

To identify Tier 3 students, make a list of the bottom five students in the class and a list of students who cannot jump rope or do jumping jacks. Compare those lists with the list of students who did poorly on the Lions Spelling Words. About 90% of the time the lists will have the same students. Many of these bottom students have both vision and allergy problems. According to the American Academy of Environmental Medicine about 70 percent of our students have some allergy problems with 30 percent of these hurting severely academically. These students will be in Tier 3.

Lions Spelling Words

Test your class all at one time using the word list from the Lions Spelling Words (See Appendix III) at their actual grade (e.g. 3rd grade list for 3rd graders). Sixth grade words can be used for high school students. Children do not practice the words ahead of time. Pronounce the twenty words in the manner of a spelling test using the words in sentences. To score the test examine the student’s spelling. Students who leave out three or more obvious sounds while spelling the list (e.g. afer for after, “uner” for under, “chid” for child, “dap” for damp) or reverse letters (b-d, h-y, n-u among others,) write a capital D or B in the middle of a word, probably have auditory processing problems due to allergies. RAPS automatically analyzes spelling patterns so that a teacher does not have to do this.

Lions Crane Auditory Processing - Allergy Checklist

Possible allergy problems can be indicated by any “yes” answers on the Lions Crane Auditory Processing – Allergy Checklist.

Lions Crane Auditory Processing-Allergy Checklist¹²

(See page 35) (To be filled out by the teacher)

| Academic Allergy Screening | | |
|--|------------|-----------|
| <i>To be filled out by teacher.</i> | | |
| | Yes | No |
| 1 Good days and bad days? | | |
| 2. Louder than other students?* | | |
| 3. Reverses letters? | | |
| 4. Leaves out obvious sounds while spelling? | | |
| 5. Can't hop, skip or jump rope, clumsy?* | | |
| 6. Slow turning in assignments? | | |
| 7. Over-active, always moving? | | |
| Total | | |

*Students with these two symptoms probably had ear infections, were given antibiotics that killed the good bugs in their stomachs and as a result developed a yeast infection that causes allergies.

- ¹ Brodney, A., Kehoe, P., Identifying Visual Dysfunctions in Elementary School Children Using Teacher Assessment, J Behav Opto, Vol 17/Number 1, 2006
- ² Crane, A. Crane V., Reading Problems Resolved, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006
- ³ Lions Templates were developed by the Winter Haven, FL, Lions Club. They had over 25 years of research with five PhD being earned. At one time the program was used in over 3,000 schools.
- ⁴ Crane, A. Crane V., Reading Problems Resolved, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006
- ⁵ Occupational therapist often give the Visual Motor Integration Test. Any problem found on this test can usually be remediated with templates in 18 fifteen-minute sessions.
- ⁶ Curry, GI, Winter Haven's Perceptual Testing and Training Handbook, Winter Haven, FL:Winter Haven Lions Research Foundation, Inc.
- ⁷ Crane, A. Crane V., Reading Problems Resolved, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006
- ⁸ Crane, A. Crane V., Reading Problems Resolved, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006
- ⁹ Rapp, D, Is This Your Child's World, New York, Bantam Books, 1996
- ¹⁰ Rapp, D, Is This Your Child's World, New York, Bantam Books, 1996
- ¹¹ Rapp, D, Is This Your Child's World, New York, Bantam Books, 1996
- ¹² Crane, A. Crane V., Reading Problems Resolved, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006

Enhancing Skills

As parents and teachers, we are not expecting enough from students. By using proven research based programs and technology, anyone who can skip, hop, or catch a ball can be well on the way to reading and writing proficiently in one semester. LCRP's goal is for all children to read and write proficiently. All this can be done for a fraction of the cost of small group or one-on-one instruction.

Information For Parents

Most vision specialists recommend children have a complete eye exam every year. To locate an informed optometrist near you call New Mexico Optometric Association at (505) 751-7242 or Optometric Extension Program Foundation at (949) 250-8070 or Lions Crane Reading Foundation at the Dream Center in Las Cruces (505) 527-1003. Take the Lions-Davis Vision Efficiency Test, the vision checklist and the results of the copy (focusing) test to the doctor for the appointment. If parents wish their child to have an exam using the Wick-Dwyer Standards, give a copy of Dr. Wick's section (Appendix V) to their eye doctor.

If the eye doctor tells you your child is fine and has 20/20 but your child reports symptoms on the Functional Vision Checklist and/or is inefficient on the Lions-Davis Visual Efficiency test and/or, slow copying from the chalkboard remember what Dr. Hubel said. "If an ophthalmologist or optometrist tells you nothing can be done about binocular dysfunction, find somebody else who's more open." *Journal of Behavioral Optometry*. Volume 17/2006/Number 4. Dr. Hubel won the Nobel Prize in 1981 for his work in binocular vision.

Allergies may plug the Eustachian tube affecting balance and auditory processing and/or they may mess up the filing system so the student cannot recall information (spelling and/or math) on some days. This is what causes good days and bad days. Allergies can settle in any part of the body, especially the brain. Some students lose their spelling,

others math. If the Eustachian tube is plugged, sounds are distorted and coordination is poor. Allergies often are inherited showing up in classrooms the same way generation after generation, like parent like child. It is often an allergy problem and not dyslexia.

What Parents Can Do About Allergies

1. Go to your family doctor and have tests run or try antihistamines for two weeks. There are two kinds of allergy tests: scratch tests and drawing blood. ImmunoCap and Great Smokies Diagnostic Lab are two of the “drawing blood labs.”
2. Try an elimination diet. Make a list of your child’s five favorite foods and eliminate them for a week and then start adding them back one at a time. Note: allergies can be caused by other things besides foods: dust, mold, perfume, glue, cleaning compounds, etc.
3. Ask yourself where and when the allergic reaction is happening. What room? When? What time of year? Every year? Inside? Outside? What did the child eat? What did the child breath? What changed?
4. Try a gross motor program to change the chemistry of the brain, develop more synapses, and/or get the brain organized-any activity that moves the body. Body movement programs the brain getting it ready to learn.
5. Use Orton-Gillingham multisensory computerized phonics programs, Lexialearning.com and/or Mindplay.com. Children put on earphones to cut out outside noises and turn up the volume so they often hear phonics for the first time. While teaching academics the computer programs are training the eyes to work together as a team with fewer eye stops, fewer regressions (looking back) and more words per minute.

Dr. William Crook, an allergist, had patients eliminate milk, tea, coffee, Kool-aid, soft drinks, egg, peas, beans, corn, processed foods, sugar, wheat, peanuts, chocolate, food colors and dyes from their diet before seeing them. Seventy-five percent of these patients knew what was causing their children to be ADD or ADHD before their first appointment. Notice the first thing on his list was dairy products. Every mammal except humans weans its baby off milk when it triples its birth weight. This fact from nature should tell us something.

Dr. Doris Rapp¹ and Dr. William Crook² have elimination diets that, 60 to 75% of the time, help the parent realize what foods are causing allergies, behavior problems, and learning problems. Both have documented their findings with numerous books and videos. Dr. H.N. Levinson treats dyslexia, ADD and ADHD with antihistamines. Dr. Levinson has written two books, Smart but Feeling Dumb and Total Concentration. Our experience has been that antihistamines improve children’s academic performance about

60% of the time in a couple of weeks. Students stop reversing letters; their spelling improves; they know their math facts; their handwriting and coordination improve; they often go from the special education classroom to the gifted class in weeks; they are a lot easier to live with and stop fighting with their siblings. Our recommendation is to go to your doctor and ask him to prescribe an antihistamine for your child to try for a couple of weeks. Have your child write in a journal each day and watch for an improvement in handwriting, spelling, math, and the number of reversals. If antihistamines help, have the child continue taking them for a while. Then give him a break but have the child continue writing in the journal. When letter reversals, poor handwriting or leaving out obvious sounds in words begin to reappear, start the child on antihistamines again. If the pill works but makes the child sleepy or causes other symptoms, cut the pill in half or a fourth (this is from Levinson). In twenty years of suggesting this to parents, we have only known of four students who had to take antihistamines every day for a long period of time. Most took antihistamines only when their allergies were active. Beware, though, that unless there is a journal to watch, children slip back into the old pattern so gradually parents often don't notice until a poor report card comes home. These children must write in a journal each day.

Body Movement

Body movement programs the brain getting it ready to learn.^{3 4} Crossing the middle of the body forces both sides of the brain to work together as a team. Using either hand to catch and throw or using the computer mouse with either hand forces both sides of the brain to develop. Instead of being right brained or left brained the child can be whole brained.

Things To Do At Home

Provide a table or desk that is waist high for homework and games. Desk or table should be just high enough to fit the knees underneath. With thumbs under the chin, the elbows should just clear the top of the desk.⁵ Encourage children to sit up and not lean over their work (**kitchen tables are too high**). Hold this page four inches below your chin and parallel to the floor. Now read. This is what we are doing to most elementary students. Desks are too high. Go to school and adjust your child's desk (before or after school.) Play board games, especially chess, which requires looking at most chessmen after each move. Sudoku puzzles are excellent eye teaming practice exercises. There are few things that require as much fixating or "looking" as chess, sudoku, or knitting. Children need to practice looking, moving and shifting their eyes. TV does none of these. Playing card games teaches numbers and eye movement. Numbers have very little meaning until a child plays games needing them. Teach the child to catch and throw. A throwback and a beanbag work well. (Kmart and Walmart, have inexpensive

throwbacks.) A young unskilled child begins by sitting two feet in front of the net, letting the beanbag hit him. Eventually the child starts catching the bean bag and progresses to catching while standing, throwing and catching using either hand while standing on one foot, etc. Jump rope and jacks are great activities. If your child has a hard time learning the alphabet, the Lions templates remediate this problem in about eighteen 15-minute sessions. Templates and throwbacks are a good place to start with young children with poor academic skills.

Vision is the Gateway to the Brain. To be successful in schools the child's eyes must be able to aim, move and focus and see the letters or numbers clearly. The computer programs will have the eyes moving very smoothly in a few sessions so parents do not need to worry about eye movement. Very few vision specialists prescribe glasses to the Wick-Dwyer standards and many do not check for convergence insufficiency unless you ask them. When you ask for an appointment ask your vision specialist to use Wick-Dwyer standards. Ask your vision specialist to check your child's Near Point of Convergence, eye movement and accommodative (focusing) skills. It is very simple to check convergence. Take a pencil with an eraser on it. Hold the pencil with eraser up, about three feet from the child's eyes. Ask the child how many he sees. If he sees one, slowly move the pencil towards the child's nose. Tell the child if he sees two erasers to tell you. If you watch the eyes, one eye may "kick out" or the child reports seeing two. This distance is called the Near Point of Convergence (NPC) and should be around four inches from the child's nose. If the child sees double at twelve inches and holds a book at ten inches, he will always see double at ten inches. To remediate the problem just keep doing the test activity with the child, trying to get the eraser closer and closer to his nose. When the child sees double take the pencil back out until it is one and try again. Do not do this activity long enough to give the child a headache. Doing this activity three minutes a day for several weeks should remediate the problem.

Another activity to remediate convergence insufficiency is the Brock String. A Brock String is a string about three feet long with two beads on it. We like Lollypop sticks tied on the ends of the string but pencils do fairly well. The child holds one end of the string to the bridge of his nose and an adult holds the other end. The near bead is placed past the NPC and the other bead is placed at the end of the string. The child looks from one bead to the other several times. Wherever the child looks the strings should cross. While looking at the near bead, the strings form an X. While looking at the far bead the strings form a long V. The child should always see two strings. Gradually move the near bead in towards his nose while the child looks back and forth from the near to the far bead. Glasses often help. Usually ten ten-minute sessions will remediate this problem. Daily gains should be observed. If not, consult you optometrist.

If the child does not see two strings, alternately cover and uncover one eye quickly with your hand until two strings are seen. If this does not work, cover and uncover the other eye until two strings are seen. Jiggling the string is another way to help the child see two strings. It may be necessary to move the bead out farther or in as close as six inches. If the child does not see two strings, he is suppressing the vision in one eye. This may happen after eye muscle (strabismus) surgery. If your child can not see both strings after many attempts to see two, stop the activity and consult your optometrist. The child is suppressing the vision in one eye.

Focusing

Focusing is the ability of the eye lens to change shape. To look close, the lens becomes oval, to look far away the lens becomes flat. Focusing problems cause the child to be very slow when copying from the chalkboard or overhead. To remediate focusing problems, have the child look at something at 14 inches then look at a word, letter, or number ten feet away getting each image clear before repeating the activity. Appendix IV provides part of the Dolch Word List in big letters for the ten foot target and one with smaller letters for the 14 inch target. The student reads three words from the ten foot target and then the next three words from the 14 inch target held in his hand. Repeat for 30 words. Time the activity. When the child can look at the near and far targets and immediately start reading the words, the problem is remediated.

Impress Method of Reading

Use the **Impress Method of Reading** with your child. Parent and child sit together each holding a corner of the book. The child points to each word. Parent and child both say each word aloud, together. If the child comes to a word he does not know he points and listens, and they keep on reading. By pointing to the words the child tells his eyes where to aim (**the child must do the pointing**). Seeing and hearing the words, reinforces the learning experience. Comprehension improves when reading is not interrupted by sounding out words. It is a “warm fuzzy” time. Reading becomes fun. This method works especially well when the parent and child read the story the class will read the next day.

Computer Programs

The computer programs recommended for schools are available for home use. Lexialearning.com, Mindplay.com and Reading Plus.com.

Information For Schools

Each activity raises the education bar. Things schools can do:

1. **Adjust desks** to the right height to prevent myopia and help eye teaming.

2. **Lions templates** help struggling elementary or high school students by weaning them off television and getting their eyes ready to work at 10 -14 in. It remediates visual perception, scanning and visual attention problems. In combination with good instruction, body movement and templates help develop beautiful handwriting. (Please see sample on page 36)
3. **Body Movement programs** that require crossing the midline help students use both sides of their brain and help overcome difficulties due to allergies by either changing the chemistry of the brain or developing more synapses.
4. **Performance based testing** identifies vision and auditory processing difficulties.
5. **RAPS testing** of the whole class automatically tests students and groups for intervention in ten to forty minutes, RAPS is 100% computer based and provides lesson plans and prescription for each student or the entire class.
6. **Orton-Gillingham multisensory computerized programs** develop good eye teaming and auditory processing while teaching academics.
7. **Computerized fluency reading programs** develop good eye teaming while developing fluency.
8. Students must **write daily**. We learn to talk first, then read, then write. Students will not be competitive until they can write.
9. **Eye exams at school**. Schools need to hire their own optometrist.

Desk Height

With thumbs under chin, elbows should just clear the top to the desk. If desks are up to the chest there is no way for eye teaming to develop and many students will become myopic.

Lions Templates

Lions Templates are one of the best tools to wean children off TV and get them ready to read and write. Templates should be used with any student who has a hard time learning the alphabet, does poorly on the Lions Copy Forms, is a poor speller, has poor handwriting, or guesses at words. Together Lions templates, gross motor activities and Lexia produce beautiful handwriting and increase reading skills significantly in one semester. It takes eighteen 15-minute sessions of templates to correct most problems found on the Visual Motor Integration Test (VMI,) the Bender Gestalt Test, or the Lions Copy Forms. Lion's templates and Lions five minutes of gross motor activity between reading and math for six weeks have students writing beautifully. Crossing the midline often helps children use their whole brain instead of being right or left brained.

Body Movement

Body Movement is one of the best tools to help students with allergies. Whether it is changing the chemistry of the brain, developing more synapses, or just getting the brain organized and ready to learn, IT WORKS. Body movement will not teach academics but it will get the brain ready to learn.^{6 7} While watching TV the brain is nearly hibernating. Body movement activities are always necessary and refreshing. Five minutes of gross motor activities between reading and math for six weeks does wonders. Schools have used Kephart's⁸ gross motor program, Brain Gym,⁹ Boost Up,¹⁰ and Bal-A-Vis-X.¹¹ While crossing the midline of the body many times, children are forcing both sides of the brain to work together as a team.¹² Instead of being right or left brained they will be using their whole brain. Bal-A-Vis-X alone will do much to remediate most visual and auditory dyslexia.¹³ Bal-A-Vis-X prepares students to use their eyes, ears and brain. Jump rope, jacks, gymnastics, and throwbacks are also good activities.

Performance Based Vision Testing

Performance Based Vision Testing prevents students from slipping through the cracks. The first test to be given should be the Lions-Davis Vision Efficiency Test. It only takes one minute of classroom time for the whole class and will identify most students who need vision help. Anyone who gets closer to the paper than the distance from knuckles to elbow on this test, fails. Students usually get close to their paper or book so they can suppress the vision in one eye. These students need to be given the Stereo Fly test for depth perception. Two eyes are needed for stereo tests. Children who cannot see 100 arc seconds of depth perception need to be referred to a vision specialist. Their eyes are not working together as well as they should for academic success. The Lions Functional Vision Checklist also helps document when there is a vision problem. Copy Focus test (copying ten math problems) identifies students that are likely to have focusing problems. The last ones through probably have a focusing problem.

Performance Based Auditory Test

Give the Performance Based Auditory Test using the Lions Spelling words at class grade level. Third graders are given third grade words. Students who leave out obvious sounds or reverse letters probably have allergies. These students are usually clumsy. Their Eustachian tube is plugged due to allergies affecting auditory processing, coordination and balance. Students who are louder than other students in the class probably had ear infections and were given antibiotics. The antibiotics kill the good bugs in the stomach and allow a yeast infection to develop causing allergies.

To identify Tier 3 students, make a list of the bottom five students in the class. Compare this list with the list of poor spellers on the Lions Spelling Words and the students who cannot jump rope or do jumping jacks. About 90% of the time the students will be the

same. They probably have allergies. These students will also have many positives on the Lions Allergy Checklist and Lions Vision Checklist.

Computer Labs

Computer labs usually work better than computers in the classrooms. Schools certainly get more bang for their buck with computer labs than with computers in each classroom. Twenty-five (25) computers will serve 300 students working 30 minutes a day five days a week. Students need to be on computers at least 90 minutes a week using these programs. More is better. In the regular classroom if the teacher has groups, the number of computers needed is equal to the number of students in the largest group. Usually five or six computers are needed. Computers in the classroom above third grade seldom work well because those teachers seldom group students. If a teacher had half the computers they have students it would work well.

The center of the computer screen should be several inches below the child's eye level.¹⁴ Children should never have to look up at a computer screen. Some students will go through Lexia in two to three months. My Reading Coach may take up to 50 to 60 hours depending on where the student started. Part of our certification for New Mexico Lions Crane Reading Foundation is having teachers go through My Reading Coach as a student. Very few people who go through My Reading Coach do not learn something new the first time they see the program even if they have been teaching reading for a long time with a masters' degree. My Reading Coach is a master teacher for every student. One high school student, not a top student, went through My Reading Coach in 13 hours and 11 minutes.¹⁵ The fluency program significantly improves reading speed with comprehension in twenty 20-minute sessions. Some Tier I students' reading speed flattens out at 300 or 500 words per minute while others reach 750 with good comprehension. As long as students are making weekly gains they should continue fluency training. If the student does not make significant gains each week, the student needs to be referred to an optometrist.

Computer Programs

Orton-Gillingham Multisensory Computerized Programs work well with Tier 2 and Tier 3 students. The Orton-Gillingham approach has been around for over 50 years. It works. There are over a hundred variations of the Orton-Gillingham approach. Some require the teachers to go through years of training, some just days. Some work with large groups, some small groups, and others one student at a time. Needless to say, one-on-one is very expensive. Small group instruction is a little less expensive, but a teacher with computers can do it for a fraction of the cost of small group instruction and have much faster and better results. My Reading Coach, the most expensive Orton-Gillingham

computerized program, costs, about \$60 to teach a child to read in about 50 to 60 hours, guaranteed. Teacher training for Lexia and My Reading Coach takes one day each.

Computer programs do work. Students are responding 20 to 30 times per minute with every response timed, graded and recorded. That is a lot of documented learning and eye teaming practice. The Visagraph documents that the eyes become more efficient while working on Lexia, My Reading Coach and Reading Plus with fewer and quicker eye stops. In a computer lab with 25 computers, students are often responding more than 500 times per minute and the computer is recording and re-teaching the student as well. Instructions and directions can be in either English or Spanish. This is great for accountability for schools and parents. There is no way for a teacher to document every response of each individual in a small group and help each student who makes an incorrect response. The computer can say, "That is not quite right," without shattering the student's self-image. Students are working at their own rate and level. The computer programs tell the teacher when students need off computer help and which black line master to use. The black line master tells the teacher or aide exactly what to say and do. The targets are large with not too many letters or words on the screen and are on a colored background. The colored screen eliminates most scotopic problems. If you look in a computer lab the students are sitting 18 to 28 inches from the screens looking at letters about 3/8 of an inch high. This is a lot easier on the visual system than having to converge their eyes to 10 to 14 inches while looking at a book with very fine print.

Lexia: Orton-Gillingham based.

Early Reading (LER) for Kindergarten and struggling first graders.

Primary Reading (LPR) for Kindergarten through 3rd grade.

Strategies for Older Students (SOS) for 4th grade through adult.

Grade levels are approximate. Let the child progress to the next level if he is ready. The programs do as much for vision development as for academics so let the student go through all the levels of either Primary Reading or Strategies for Older Students. A good student sees about a third of the program and can often go through in three months or less. Students need at least 1/2 hour three times a week-five is better. Struggling students benefit from more time. Yellow dots appear above the student graph when the student repeats the same activity three times. At this point the teacher intervenes. Lexia has excellent reports. Students are really motivated by recording their progress on their own paper and pencil graphs.

My Reading Coach: Orton–Gillingham based.

Appropriate for seven year olds or adults.

My Reading Coach has 61 lessons based on how well a student spells. There is no way to complete this program and not learn to read. The placement test is based on spelling patterns. Students go only through lessons needed. Lessons include: sounds, spelling, reading, grammar and comprehension. The program does as much for vision development as for academics. Research says after students finish lesson 47 none will be in the bottom three stanines. My Reading Coach has excellent reports. Teachers should print the Daily Lesson Plan daily. The program has off computer lessons for comprehension as well as lessons to help a child experiencing difficulty. It groups students needing the same activities and tells the teacher which black line master remediates the skill needed. Students should be on the program about 45 minutes a day, 4 or 5 times a week. The more time on the computer the faster the progress and the better the student likes the program. MRC acts as another master teacher in the classroom. After 61 lessons the student will be reading at his vocabulary level or 10.5 grade level. It takes between 40 and 50 hours for a student to complete the program. We had a high school student (not top student) finish it in 13 hours and 11 minutes.

We use My Reading Coach primarily for Tier 3 students. However, we want all of our grandchildren to go through My Reading Coach. It is a very good way to be sure a child has all the reading skills necessary to read and spell any word. Good students should go through it in less than 20 hours, and that is a very small amount of time out of 12 years. We feel teachers, reading teachers and especially reading specialists should be required to go through My Reading Coach as a student before they are certified. My Reading Coach teaches all the rules and then test to see if you can apply (hear) them.

Fluency Programs: Fluent Reading Trainer, Reading Plus-stories with a moving slot
PAVE or PET three numbers per line with a moving slot.

Use PET or PAVE the first day of school and every day until the child reaches 120 lines per minute three times. The student does not need to continue this activity at that point. PET and PAVE should be used about five minutes a day along with any level of Lexia or My Reading Coach. The student counts how many of a designated shape, number or letter he sees. The programs teach eye teaming, left to right eye movement and return sweep as needed for reading. They do as much for vision development as for academics. Students start at 20 or 30 lines per minute and continue working until they can go 120 lines per minute. Five minutes a day until the child reaches 120 lines per minute several times is enough. PAVE and PET are the two best eye movement tests requiring the least knowledge. PET starts with the student hitting the space bar every time a different shape

appears. It progresses from shapes to numbers no higher than five and no more than ten in an activity. Students learn their numbers to five and can count to ten at a very young age.

Guided Reading or Fluent Reading Trainer. The goal of computer fluency programs¹⁶ is to train students to read faster than they can talk. These programs use a moving slot that forces students' eyes to move across the line faster and faster, making it impossible to voice what is being read. Second graders often improve their vision skills to the point of reading over 250 words per minute with good comprehension. The record words per minute for a second grader is 750 words per minute with good comprehension. Usually, 20 to 30, twenty-minute lessons have students reading efficiently. Many high school special education students learn to read grade level stories at 750 words per minute with good comprehension.¹⁷ They have moved from Tier 3 up into Tier 1. With these tools we can expect great things from our students¹⁸ even Tier 3 students. To make their program really effective, school districts would do well to hire their own optometrist.

Use the fluency programs after the child has finished 3 levels of Lexia or lesson 30 of My Reading Coach. Stories with a moving window force the student to read faster and faster finally breaking the voicing habit (mentally saying every word.) Most 2nd graders can be expected to reach 200 to 300 words per minute with good comprehension. (3rd graders 350) We recommend starting everyone at 100 words per minute or his known speed and progressing by 10 to 20 wpm each time he reads a story as long as comprehension is 70% or better. We recommend starting at a very easy level .5 or 1.5 reading grade level so students can learn to read fast on easy material, but they must keep their comprehension high. For students who are learning phonics, Fluent Reading Trainer has .5 grade level decodable stories. When a 300 words per minute rate is reached go up a grade level and drop speed to about 150 wpm. Keep repeating this until they read at grade level and then let them go on up in speed. If students are just not quite ready for fluency training on their own, try placing three students in front of a computer with an adult and reading the story aloud together at 80 to 100 words per minute. A couple of weeks of this usually gets the students reading successfully on their own. To read a story initially takes about 20 minutes. These computer fluency programs are the ultimate performance-based vision screening tool. Any student not reaching 200 words per minute or making significant gains each week should be referred to an optometrist.

School Optometrist

The U.S. government demands (No Child Left Behind) all children be proficient readers, but reading requires adequate vision and auditory skills. The eyes are truly the gateway to the brain. Due to the fact that 80 to 90% of learning occurs through the eyes, children

must have good vision skills. Research shows the vision screening tests used in schools are just not good enough to identify vision problems interfering with learning.¹⁹

Schools hire speech therapists for students who cannot say the sounds. Schools hire occupational therapists for students who cannot move their bodies. Schools need to hire optometrists for students whose vision skills are inadequate for the academic demands. Vision services are available outside of the school, but for various reasons many parents do not get these services for their children. Research shows that even if glasses are free many parents still do not get their children an appointment.^{20 21} That puts these children at risk. So schools must provide these necessary services.

This is especially true in New Mexico since half of the students are on Medicaid and entitled to a free eye exam each year. This service would be free to schools. Right now in New Mexico schools, Medicaid covers only children in Special Education. This rule needs to be changed so other students can be served as well. Native Americans and Hispanics have five times more astigmatism than Anglos. This alone could explain the high dropout rate for Hispanics. The University of Arizona Ophthalmology Department recently reported that 50% of Native American kindergarten students need glasses.²² This service would be free to schools for Medicaid students. The University of Arizona Ophthalmology Department also reports that if the correction for astigmatism is not made while children are young, it is hard to get them to wear glasses later in life.

In an effort to aid small schools and to help larger schools start hiring their own optometrist, New Mexico Lions Crane Reading Foundation has become a Medicaid provider and will furnish optometrists to do complete eye exams in schools. Local optometrists will initially have first choice to furnish this service.

Educators and professionals need to shift from vision acuity screening and tests to performance-based vision screening and tests. While performance-based vision screening will not identify the exact problem, it will let you know there is a vision problem. Acuity vision screening tests when done by trained optometrists and pediatric ophthalmologists, miss 30% of the severe problems.^{23 24} Acuity vision screening tests are just not good enough to identify problems that interfere with learning.^{25 26} There are many other minor visual skills that will interfere with learning besides acuity. A performance-based vision screening test will identify that there is a vision problem. Performance-based vision screening tests are good predictors of academic success.^{27 28}

Other performance-based tests such as the Stereo Fly Test, Developmental Eye Movement Test,²⁹ Visagraph³⁰ or Readalizer³¹ are excellent predictors to determine if a child is ready to read. These tests are individually administered and therefore time-consuming and costly but are great for documentation of the problem. If a child is to be

labeled or retained, several performance based tests should be given before retention or the student is labeled. If it is a vision problem, the child should not be retained or labeled until the vision problem is remediated. PAVE³² and PET,³³ computer administered performance-based vision programs not only alert teachers when there is a problem but also help remediate the problem. PAVE and PET both present three letters or numbers per line for twenty lines. They start out slowly and get faster and faster. Students count the number of times a certain number, letter or shape is seen. PET is better for younger children. PET has a moving slot, teaching children to read left to right. If children know their shapes or their numbers to five, they can take the PET test and work on the problem. Significant gains should be seen each week or the student should be referred to an optometrist.

Summary of Response to Intervention

RAPS 360 tests a whole class in forty minutes of computer lab time and automatically places students in the right program at the appropriate level. Any student not making significant gains each week should have an eye examination by an optometrist. **With 80 to 90% of learning through the eyes, Lions feel schools can get more bang for their buck with an optometrist than any other professional specialist.**

Recipe for elementary success. If all kindergarten through second grade students who can hop, jump rope or do jumping jacks are placed in Lexia and either Fluent Reading Trainer or Reading Plus for fluency training and have five minutes a day of Lions 5-Minute Exercise tape for six weeks, Bal-A-Vis-X an hour a week, do Lions templates 15 minutes a day for about 4 weeks, and write daily in a journal, there will be no Tier 2 or Tier 3 students-all will be Tier I students writing beautifully and many reading over 200 words per minute with good comprehension.

Tier I (Enhancement) students K–12 will benefit from 90 minutes a week of fluency training using either Fluent Reading Trainer or Reading Plus. Using Bal-A-Vis-X 60 minutes a week for a semester will help them become whole brained. When they peak out on fluency training they are ready for A Plus or Pluto to learn content areas. Can you imagine how much more a student can read and learn at 500 words per minute without having to reread.

Tier 2 (Supplemental) students K–12 need each day for a semester:

1. Lexia thirty minutes a day
2. Lions templates 15 minutes for six weeks
3. PET five minutes a day until efficient
4. Fluency training to break the voicing habit

5. Lions 5-Minute Exercise tape each day for six weeks
6. Bal-A-Vis-X 60 minutes a week for a semester will help them get their brains organized and ready to learn.
7. Daily writing-we learn to talk first, read next, and then write.

With this program most Tier 2 students will move into Tier I in one year or less.

Tier 3 (Intensive Intervention) students K – 12 need each day for a semester:

1. Eye exam at school
2. My Reading Coach 30 to 60 minutes a day
3. Lions templates 15 minutes for six weeks
4. PET eye movement training until efficient (usually three weeks)
5. Fluency Training to break the voicing habit; many will read at grade level 750 words per minute with good comprehension .
6. Lions 5-Minute Exercise tape for six weeks; then Bal-A-Vis-X. These program the brain getting it organized and ready to learn.
7. Writing daily-we learn to talk first, read next, and then write.

With this program most Tier 3 students will move into Tier 2 or Tier 1. There will always be a Bell Curve, but the standards will be much higher.

Recipe for college level success Our Tier I students are meeting many Tier I students from Asia in college and finding the competition unbeatable. In order to be competitive with Asian students, body movement must be included to get the whole brain functioning and organized and ready to learn and receive reading fluency training. Most students can be reading between 500 and 750 words per minute within weeks. If this is done, the Tier I students will be competitive.

What NM Lions Crane Reading Foundation Offers Schools

- Training for teachers, aides, administrators, and volunteers certifying them NMLCRP to help students reach their full potential as quickly as possible. (Second Friday and Saturday of each month at the Dream Center in Las Cruces (505-527-1003).
- If a school is struggling to meet the NCLB goals, New Mexico Lions Crane Reading Foundation will contract with the school to help meet these goals in an after school program. In the past, the program has shown a 97% success

rate with kindergarten through high school students. Lions would be paid for years gained in reading, not for baby sitting time. Every facet of the program is research based and supplemental to any reading program.

- Train your teachers and aides or furnish our certified teachers and aides
- Principal has option to be the administrator or our administrator. Administrator would send in weekly computer report showing how long each student had been in each program and report each students progress. (Accountability) Would take 15 minutes a week to print up computer reports.
- Program tailored to meet the needs of each school.
- Most goals can be well on their way to being met in one semester. The program works from Head Start to College. It is research based and supplemental to any reading program.
- New Mexico Lions are sponsoring a vision screening for all 1 to 6 year olds with a digital camera that can detect myopia, hyperopia, astigmatism, strabismus and amblyopia,
- If schools wish to open the program to the community in the evenings, the program will help adults read fluently and perhaps get off welfare.

NM Lions Children's Photo Eye Screening

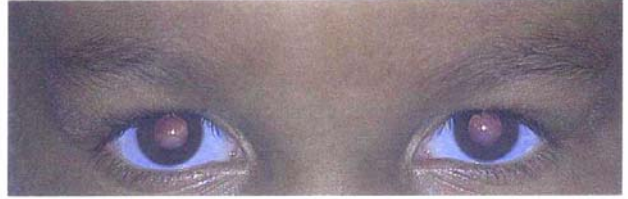
Another of the signature projects of Lions Clubs throughout New Mexico is the Photo Eye Screening of young children. Two types of cameras are currently in use. The first is the Photo Eye Screening Camera which uses a special type of Polaroid instant film and the Medical Technology, Inc., patented. The second camera, the iScreen system, is digital.

Since most children do not get their first vision test until after they enter elementary school, a vision screening at an early age can help head off the potentially devastating effects of these childhood eye disorders. More specifically, it is estimated that currently 10 to 40% of the youngsters (depending on area) will have one of these eye disorders but only one in four will be checked in time to do something about it. Once the picture of a child's eyes has been taken, the resulting photo is sent to a specialist who evaluates it. The evaluation results are then sent back to the respective Lions Club. If the results show there are problems, the parents of the child are notified that they should take him/her to an eye doctor for testing. Parents are told during the screening that if they hear nothing back, they are to assume the results of their child's eye screening showed there were no problems. The screening process costs the Lions Clubs \$4-\$5 per child which includes the price of the film, equipment, photo evaluation, and handling/postage.

The Photo Eye Screening is ideal for children from a few months old to age six because in this screening, they are passive and are not required to respond to any questions. Many states are now beginning to require an eye exam before a child enters kindergarten. Below are pictures from the iScreen camera.



Normal Reflex



Normal Reflex



Anisometropia - unequal refraction



Anisocoria - unequal pupil size



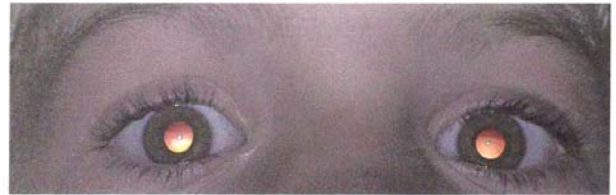
Cataract



Coloboma



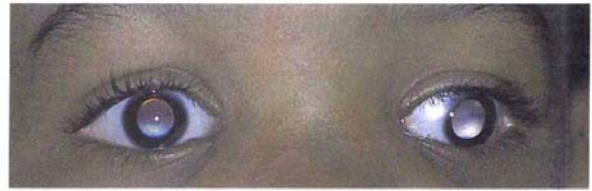
Hyperopia - Farsightedness



Myopia - Nearsightedness



Strabismus - Esotropia OD



Strabismus - Exotropia OS



Ptosis - Drooping Eyelid

In Conclusion – The Lions Crane Reading Program Works

Over the last few years, there have been many success stories for the Lions Crane Reading Program. Following are some testimonials:

I have been the principal of Central Elementary School in Santa Clara, NM, for two years. When I arrived, the school, which has a 93% Hispanic population and where 100% of the students qualify as economically disadvantaged, was on academic probation with only 28% of its fourth grade students reading proficiently. The school made some adjustments in the delivery of reading instruction and integrated the Lions Crane Reading Program. Last year, the fourth grade students improved to 46% proficient readers. This year, that score increased and the fourth grade students improved to 84% proficient readers. This year the third and fifth grade students were also assessed using the NMSBA and the school as a whole in grades three through fifth is at 76% reading proficient. Central Elementary is ranking 37th out of approximately 447 elementary schools in NM in reading proficiency.


José E. Carrillo

We have two second grade special education students who are now reading at the fifth grade level after completing the Lions Crane Reading Program. I believe in the program. Anything we can do as a school district to get all of our kids on the program we're going to do.

George Peru, Director of Special Education, Cobre School District, NM

Reading Problems Resolved by Allen and Virginia Crane is a treasure for truly turning around the lives of many children. Page after page tells how to detect and eliminate various common and some less frequently recognized visual problems that can interfere with the ability of a youngster to learn. It will enable parents and teachers to detect a variety of problems that interfere with reading speed and comprehension-which in turn can affect the rest of a child's life. It provides clues to help detect other common causes of reading problems such as those due to allergies, desk position, etc. It not only provides sensible answers regarding the most common causes of visual difficulties, it provides answers that are practical, affordable, and possible. Every teacher and parent needs this book. This book is needed at an international level to help children all over the world. The Lion's Organization is to be commended for truly helping to create and promote this book so children who have visual and learning problems can be helped to reach their full intellectual potential. What a monumental contribution they have made to our future generations!

Dr. Doris Rapp, M.D. Clinical Assistant Professor of Pediatrics at SUNY AB and Author of *Is this Your Child's World* and *Our Toxic World*.

3-4-05 

What I like about first grade is we get to write, read and color a lot. My favorite special is P.E. I also like first grade because we get different spelling words. My favorite thing in science was the warm and cold blooded booklet. I like math because it has hard math problems. In math we learn to use our minds and think. My friends are Lavenia, Matthew, Christopher, Dominic and Gustavo. Music is fun because we get to learn new songs. Recess is fun because it has a big play set to play on. I like Art because we get to paint. Reading is fun because you can do it on the computer and in reading groups. Library is fun because you can check out books.

Example of writing by a 1st grader after seven months of LCRP training. **If your first graders cannot write this well, then think about getting on the Lions Crane Reading Program bandwagon!**

-
- ¹ Rapp, D, *Is This Your Child's World*, New York, Bantam Books, Rapp, D, *Is This Your Child's World*, New York, Bantam Books,
- ² Crook, WG, *Solving the Puzzle of Your Hard-to-Raise Child*, New York, NY: Random House , 1987
- ³ Hubert, Bill, *Bal-A-Vis-X*, Bal-A-Vis-X, Inc. 7412 West Tenth Street N, Wichita, KS 67212, 2001
- ⁴ Minnesota learning Resource Center, *A Chance To Grow*, 1800 Second Street NE, Minneapolis, MN 55418, 22001
- ⁵ This is known as the Harmon Distance. Harmon, DB, *Notes on a Dynamic Theory of Vision*, 1958, Austin, TX, Nalle Bldg.
- ⁶ Hubert, Bill, *Bal-A-Vis-X*, Bal-A-Vis-X, Inc. 7412 West Tenth Street N, Wichita, KS 67212, 2001
- ⁷ SMART Curriculum Guide, Minnesota learning Resource Center, 1800 Second St. NE, Minneapolis, MN 55418
- ⁸ Kephart, NC, *The Slow Learner In The Classroom*, Columbus, Ohio, 1960,
- ⁹ Dennison, PE, *Brain Gym*, Ventura, CA, Edu-Kinesthetics, 1994
- ¹⁰ SMART Curriculum Guide, Minnesota Learning Resource Center, 1800 Second St. NE, Minneapolis, MN 55418
- ¹¹ Hubert, Bill, *Bal-A-Vis-X*, Bal-A-Vis-X, Inc., 7412 West Tenth Street N., Wichita, KS 67212, 2001
- ¹² Hubert, Bill, *Bal-A-Vis-X*, Bal-A-Vis-X, Inc. 7412 West Tenth Street N, Wichita, KS 67212, 2001
- ¹³ Boost Up and Bal-A-Vis-X both move bottom kids up from bottom group to top group thus it must be correcting Dyslexia.
- ¹⁴ Sheedy, J., *Doctor Ergo CVS Doctors and Meeting The Eye Care Needs of Computer Users*, J Behav Opto Vol 11/Number 5/2000
- ¹⁵ She went to summer school for 16 days, four hours a day. When she started she was reading on fourth grade level, 125 words per minute. She progressed to 10.5 grade level material, reading over 400 words per minute with good comprehension. She had been viewed as a problem in the classroom and started her senior year as a quiet "A" student who raised her hand often.
- ¹⁶ Fluency Reading Trainer and Reading Plus both have a moving slot forcing the students to read faster and faster.
- ¹⁷ Alamogordo High School , Special education classes, Brenda Holmes. 2005
- ¹⁸ Lions Crane Reading Program Video, 2004
- ¹⁹ Crane, A. Crane V., *Reading Problems Resolved*, NMLCRF, P.O. Box 2846, Las Cruces, NM, 88004, 2006
- ²⁰ Orfield, O., Basa, F., Yun, Y., *Vision Problems of Children In Poverty in an Urban School*, JOVD, 2001, Volume 32
- ²¹ Mozlin, R., *Poverty Neurodevelopment & Vision*, J Behav Opto, Volume 12/Number 3, 2001
- ²² www.eyes.arizona.edu/Research/VisualDevelopment/TOVSP
- ²³ Mozlin, R., *A Perfect World*, J Behav Opto, Volume 16/Number 1, 2005
- ²⁴ Suchoff, I. B., *More on Vision Screening*, J Behav Opto, Volume 15/Number 3, 2004
- ²⁵ Mozlin, R., *The Epidimiology of School Vision Screenings*, J Behav Opto, Volume 13/Number 3, 2002
- ²⁶ Zaba, J. N., Mozlin, R., Reynolds, W. T., *Insights on the Efficacy of Vision Examinations & Vision screenings*, J Behav Opto, Volume14/Number 5, 2003.
- ²⁷ Orfield, O., Basa, F., Yun, Y., *Vision Problems of Children In Poverty in an Urban School*, JOVD, 2001, Volume 32
- ²⁸ Harris, P., *Learning-Related Vision Problems in Baltimore City: A Long Term Program*, J Opto Vis Vis Dev, 2001, Vol 32
- ²⁹ Developmental Eye Movement Test, may be purchased from Bernell, 4016 North Home Street, Mishawaka, Indiana 46545.
- ³⁰ Visagraph by Taylor and Associates, Reading Plus.com, has four infrared sensors which record eye movement as a student reads. We select a story in which the student knows all the words. If the student has an eye teaming problem it shows up on Simulation as a ball bouncing all over the line of print. The student's eyes often stop 400 or 500 times to read 70 words. The eyes are trying to send the

same picture to the brain. The computer reading programs furnish good big targets and the problem is often solved in about 20 hours on the Orton-Gillingham or the fluency computer programs.

- ³¹ Readalizer, sold by OEP Foundation, has four infrared sensors which record eye movement as a student reads. We select a story in which the student knows all the words. If the student has an eye teaming problem it shows up on Simulation as a ball bouncing all over the line of print. The student's eyes often stop 400 or 500 time to read 70 words. The eyes are trying to send the same picture to the brain. The computer programs furnish good big targets and the problem is often solved in about 20 hours on the Orton-Gillingham or fluency computer programs. The Readalizer has 800 word selections to determine what is happening when the student reads for a prolonged period of time.
- ³² PAVE, by Taylor and Associates has three numbers or letters per line for 30 lines starting at 30 lines per minute. A student reports how many of a target letter or number are seen. In 15 minutes it will be going 120 lines per minute if the student gets everything right.
- ³³ PET (Practical Eye Training) by Mindplay has three shapes or numbers (initially with no numbers higher than five) per line in a moving window for 20 lines starting as low as 20 lines per minute with shapes for young children. A student reports how many of a target shape, letter or number are seen. In 15 minutes it will be going 120 lines per minute if the student gets them all right.

Lions Davis Vision Efficiency Test

Practice Page

0

0

0

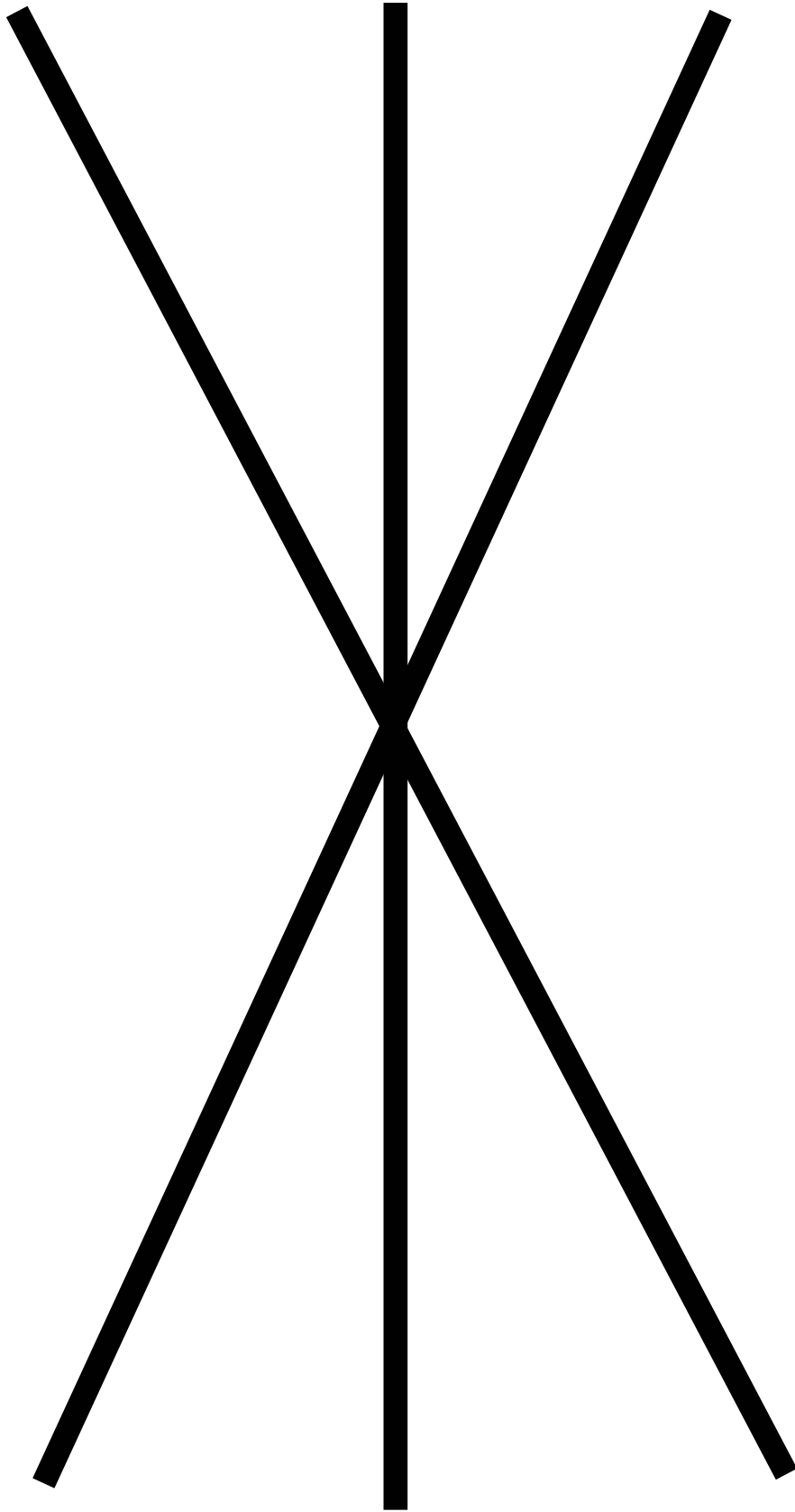
0

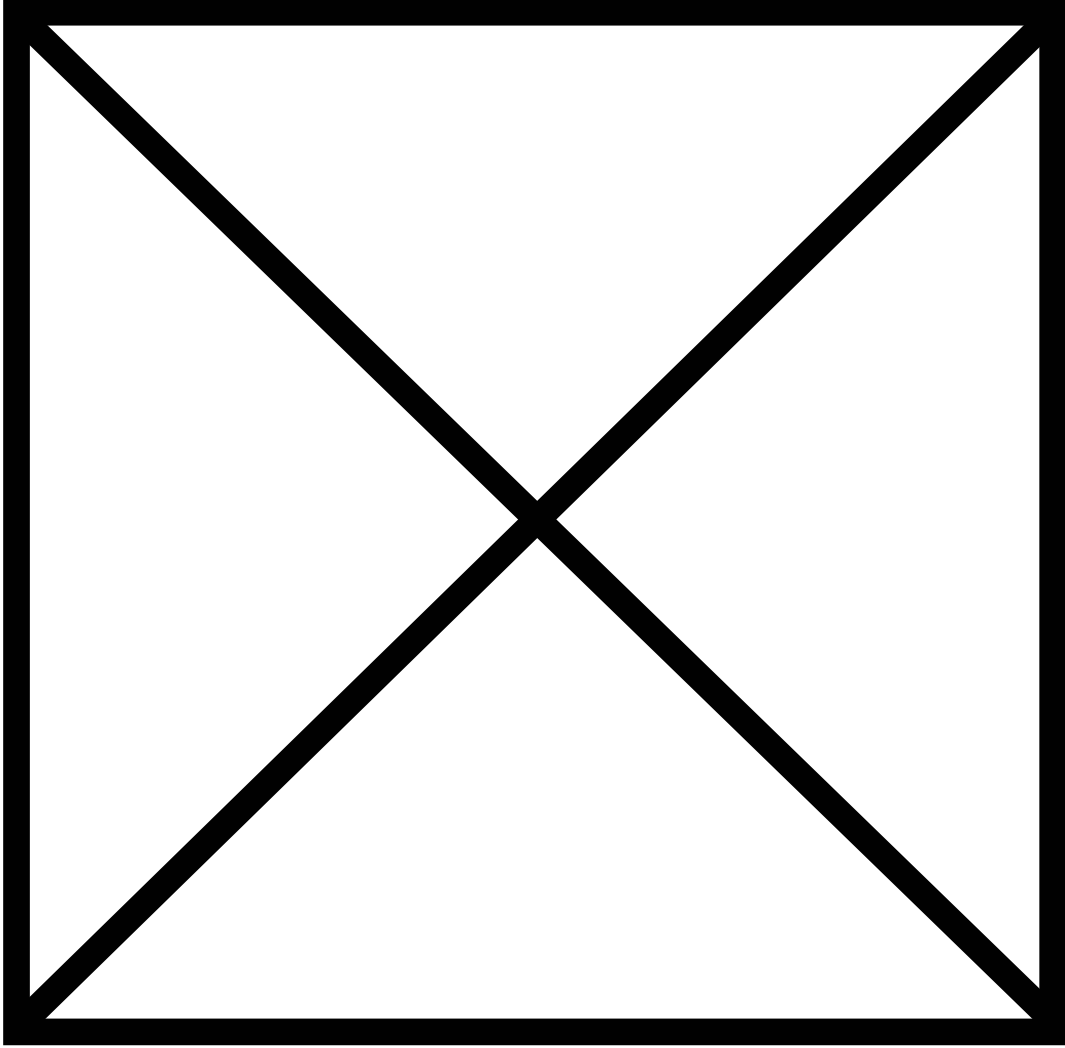
0

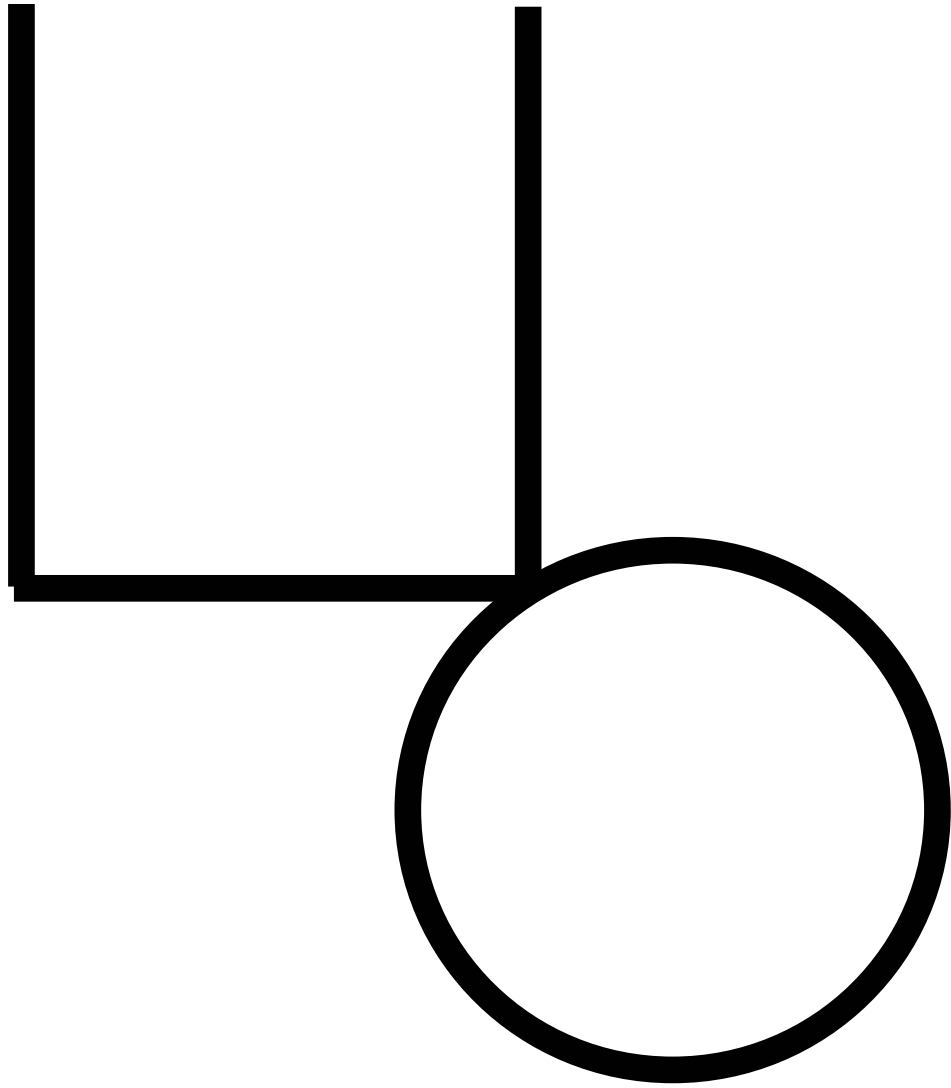
0

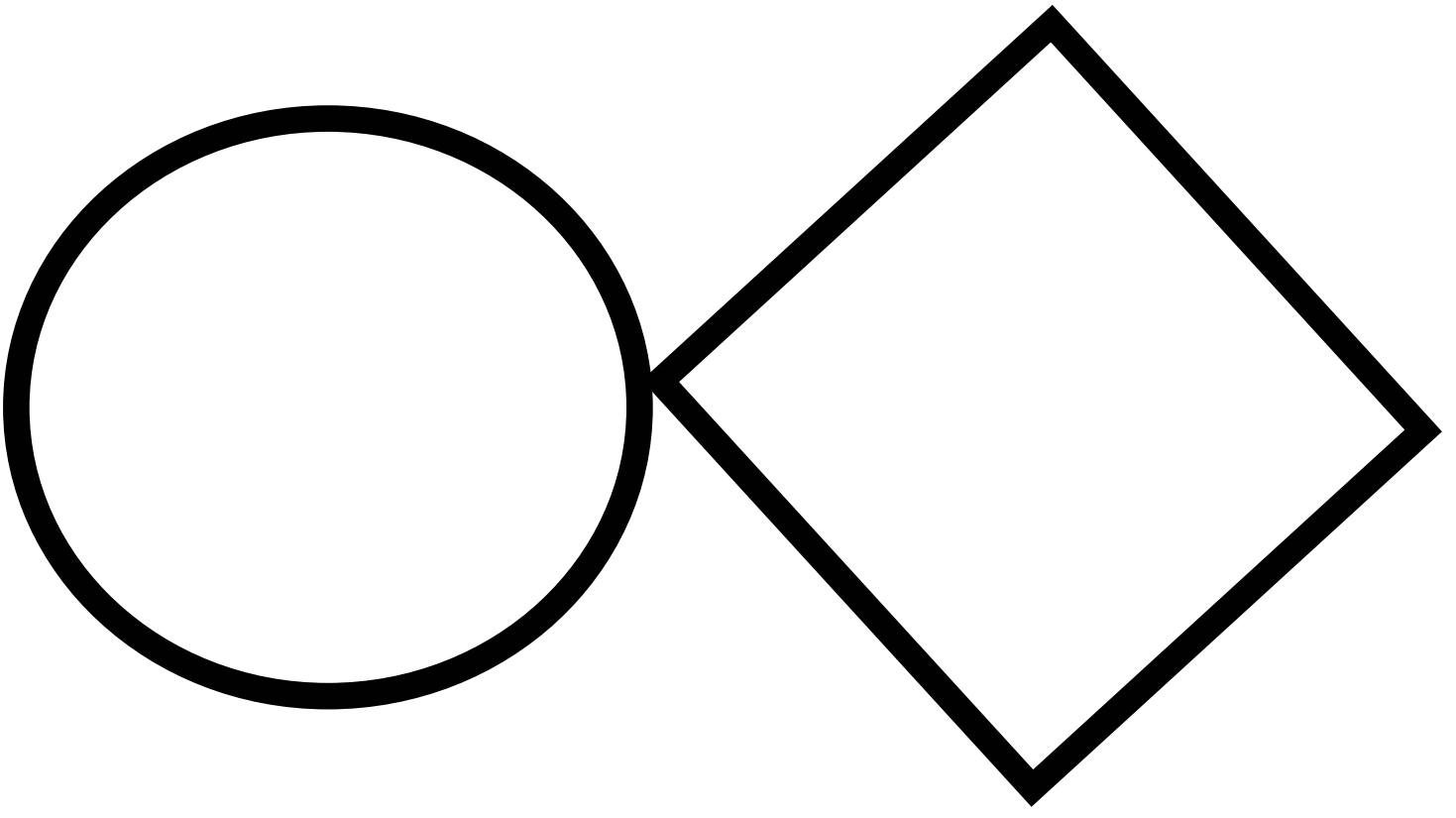
M O J A & L 2 O 17 & M 12 V O A E & O
O J A & L 2 O 17 & M 12 V O A E & O
V O A & L 2 O 17 & M 12 V O A E & O
2 4 H K +S 1 Z V O k O E X + A J I D V
W + O N O G & Y M + % h O W L O F M V
O Z & O W H 14 O T N O X J & O E A R O H B
T & F O ? 2 ? J O Z I 3 % S I D O A
L S 3 L ? a O & O G 17 # & B F N
M O % 5 ? H a 6 14 K O ? V S \$ O L 4
A H \$ % O Z O R 7 12 N 6 4 V A J 7
S \$ & Z O + F O & M O O V 17 A HJ Y 2
E O 11 M L X O Z E R H 7 O F A / V T O
Y L + J H O A I H & O & * O N F I
S J & M H + N 12 O & * O N F I
M X 14 O K \$ A N G H H S O A H W D F T O
J F FA L A + ? O Z J A M O I T O
A O G A G O J O) 1/2 Y H U N
O 1 Y 7 K M R N O C M & V D
r O H N O 18 H J O X O X & S A V I
W 2 E & L V V H Z 3 W R 11
H O # & H 5 B L O B 6 + W L 5
H G O I +4 15 F & R K A K Z
() 3 & E T 2 H D 2 I M V A Y
k O L E 3 U W 2 " L + O Y M

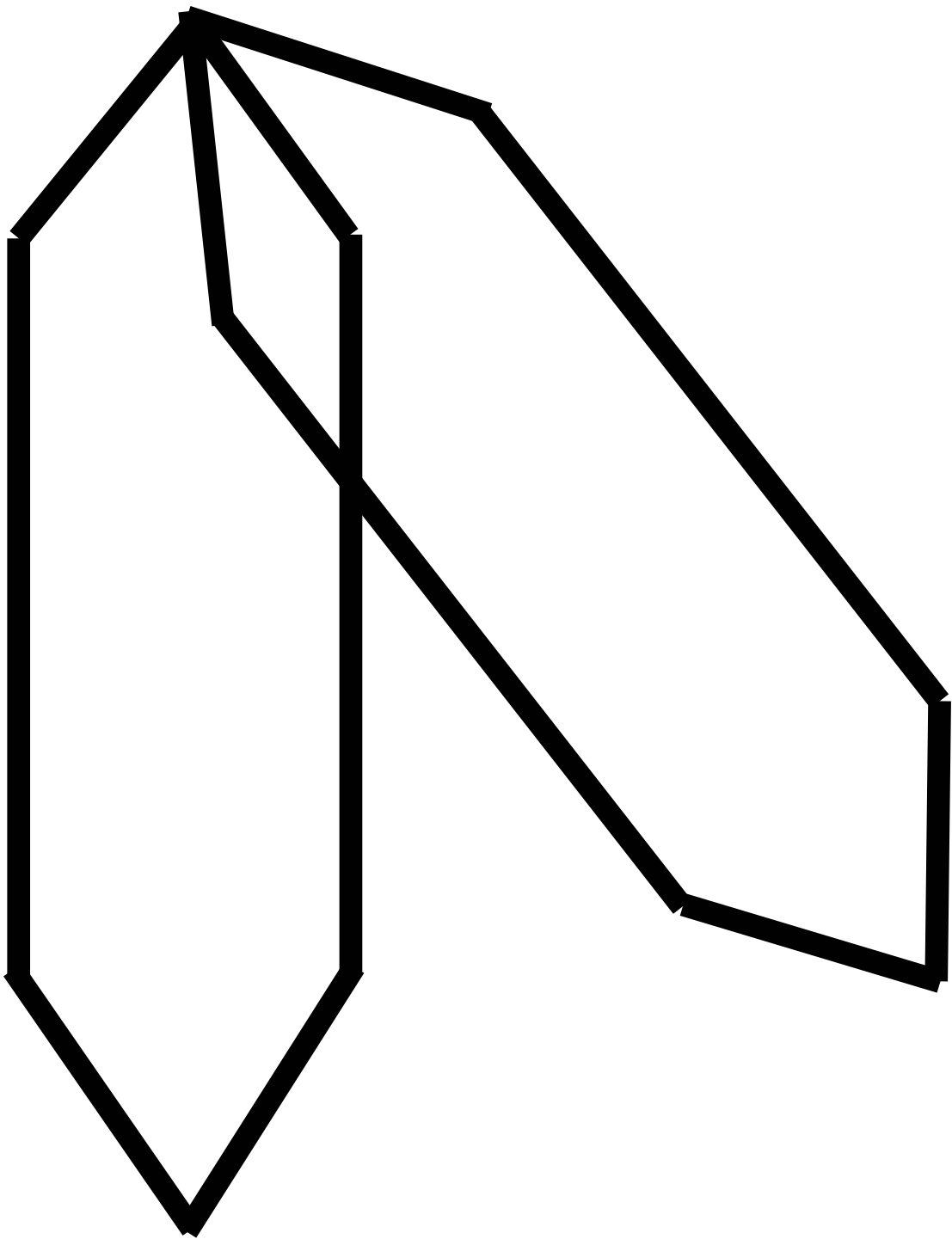
Lions Copy Forms











Lions Spelling Words

| Lions Words | | | | | | |
|--------------------|--------------|---------------|--------------|---------------|--------------|--------------|
| <i>Primary</i> | <i>First</i> | <i>Second</i> | <i>Third</i> | <i>Fourth</i> | <i>Fifth</i> | <i>Sixth</i> |
| is | came | across | forget | admit | melody | importance |
| the | what | large | against | grind | loyal | threat |
| we | under | river | child | pain | program | plunder |
| look | could | brother | whole | silence | musical | poultry |
| go | after | happen | awake | disturb | dignity | manager |
| baby | brown | friendly | flowers | forehead | limb | wealth |
| can | funny | sheep | stream | flight | perfume | location |
| down | was | eyes | island | anger | cough | radiator |
| up | dog | farmer | bench | blood | merchant | industry |
| blue | there | follow | daughter | hunger | homestead | wrench |
| in | girl | afternoon | damp | honest | semester | investigate |
| ball | work | beautiful | knife | weigh | promptly | source |
| get | then | beside | excuse | develop | crumble | graduate |
| you | laugh | field | beauty | reindeer | league | fringe |
| run | must | remember | enjoy | distant | minister | unexpected |
| come | very | great | half | million | wrist | recipe |
| ride | duck | table | yesterday | speechless | extended | monument |
| said | are | breakfast | reward | rough | review | varnish |
| by | name | middle | feast | claimed | operate | indicate |
| mother | doll | above | block | ordinary | pleasure | substitute |

Dolch Word List

Ten Feet Target

a
big
come

and
blue
down

away
can
find

for
help
in

funny
hers
is

go
I
it

jump
make
not

little
me
one

look
my
not

one
run
the

play
said
three

red
see
to

two
yellow
am

up
you
are

we
all
at

ate
brown
did

be
but
do

black
came
eat

Hand Held Target (10-14 inches)

| | | |
|---------------|---------------|-------------|
| a | and | away |
| big | blue | can |
| come | down | find |
| for | funny | go |
| help | hers | I |
| in | is | it |
| jump | little | look |
| make | me | my |
| not | one | not |
| one | play | red |
| run | said | see |
| the | three | to |
| two | up | we |
| yellow | you | all |
| am | are | at |
| ate | be | black |
| brown | but | came |
| did | do | eat |

Directions:

Place large words on a wall ten feet away. Hold small words in hand, at 10 to 14 inches. Read down the list. Read the first three from the wall. Read the next three words from the small print held in hand. Repeat, reading three from far, then three words from close until column is read. Time the activity. When the eyes look far away the lens in the eye gets flat. When you look close, the lens gets oval. With practice this focusing becomes more efficient. (To keep students from memorizing the words, change the directions. Tell them to read from their hand first. Read a different column. Read across. Read bottom to top.)

Note: The small print on this page is about 20/40 held at 14 inches. If they can read the far one but not this close one they need their eyes checked by an optometrist.



Symptom Based Prescribing

By Bruce Wick, OD PhD College of Optometry, University of Houston, Houston, Texas

Abstract for Parents and Teachers: A survey of optometrists and ophthalmologists was conducted in 1968 to find out the vision correction prescribing habits, which had been developed over the years. These standards (from untested wisdom) for putting glasses on patients were used in a study called the Orinda Study and are used by most eye doctors to prescribe glasses today. Recent research further refines the art of refraction for glasses. A combination or a varying level of several of the following can lead to major educational problems: nearsightedness; farsightedness; astigmatism (shape of the eye ball); focusing; and alignment error. To complicate matters, some students will be nearsighted in one eye and farsighted in the other and could have a different type of astigmatism in each eye. By correcting these minor problems, education is made easier. Note that this technical paper was written specifically for optometrists and ophthalmologists. Allen Crane

Patients commonly present with uncorrected ametropia (refractive error or need for glasses). It is also frequent for these same patients to have a vergence (eye misalignment) or accommodative (focusing) disorder. For example Dwyer¹, who assessed the refraction, vergence, and accommodative status of nearly 150 consecutive patients, found that 39% presented with ametropia and nearly 80% of them also exhibited a vergence and/or accommodative disorder. These facts suggest that correction of a refractive error may be an important step in management of patients with vergence and/or accommodative anomalies who have a significant refractive error. Unfortunately, determination of what constitutes a “significant” refractive error is sometimes problematic.

In clinical care the eye doctor anticipates that the patient with an esophoria (eye crossing) will achieve resolution of symptoms with refractive correction of hyperopia (farsightedness). Similarly, it is hoped that a myopic (nearsighted) correction will improve an exophoria (outward or “wall-eyed” turn), or at least not aggravate the vergence or accommodative status at near. Unfortunately, this may not occur. As a result, a common recommendation is for prescription of an "optimal correction" to restore clear retinal images.^{2,3} Such recommendations suggest slight under plus of patients with exophoria and maximum plus for patients with incompletely compensated esophoria, even including added plus lenses at near (bifocals).

Refractive Correction

The Orinda Study⁴ is considered the “gold standard” for vision screening techniques. In this landmark study optometrists and ophthalmologists were surveyed to determine vision correction prescribing habits. The recommendations of the two vision care professions were then combined to determine the screening criteria used in the Orinda Study (Table 1). Because of the consensus achieved, the guidelines presented there are used by most clinicians for lens prescription as well. As a result, virtually all practitioners will agree with prescription of refractive correction when a person has ametropia greater than the Orinda Study standards.

The Orinda Study advice listed above concerning prescription of distance refractive correction arose on the basis of untested clinical wisdom developed over many decades of practice. Dwyer and Wick⁵ tested these hypotheses and reported improvement of binocular function that resulted one or more months after prescription of an initial spectacle correction for 143 non-strabismic patients who had a refractive error and either a vergence anomaly (28%), an accommodative anomaly (8%), or both (64%). Refractive correction was estimated objectively with an autorefractor and subjectively refined without cycloplegia. Most corrections were low to moderate in power, essentially following Orinda Study guidelines. Recovery of normal vergence and accommodative function varied according to refractive error type and vergence anomaly. The results of Dwyer and Wick suggest that improvement in acuity is not the only reason for prescription of a refractive correction. Prescription of even small corrections should be considered as these can dramatically improve vergence and accommodative function for many patients.

| | |
|---------------|--------|
| Hyperopia | >1.00D |
| Astigmatism | >0.75D |
| Myopia | >0.50D |
| Anisometropia | >0.75D |

Extending the Orinda Study guidelines to incorporate those of Dwyer and Wick yields the refractive correction recommendations listed in Table 2. This compilation takes into account the type of refractive error and the axis of the astigmatism. Combination of these two factors improves the likelihood that the refractive correction will improve the patient’s clinical findings.

Symptoms Based Prescribing

The Modified Refractive Prescription Guidelines listed above are based on a developed consensus of optometrists and ophthalmologists (Orinda Study) and the clinical research of Dwyer and Wick concerning improvement of clinical findings after prescriptions have been worn. Not accounted for in these guidelines is the fact that a large number of students are symptomatic. McKeon et al⁶ and Crane⁷ have independently developed questionnaires that attempt to quantify visual symptoms.

| | |
|-----------------------|---|
| Spherical Hyperopia | $\geq 1.00D$ |
| Hyperopic Astigmatism | $\geq 0.50D$ Hyperopia; $\geq 0.50D$ ATR astigmatism |
| Astigmatism (WTR) | $\geq 0.75D$ |
| Astigmatism (ATR) | $\geq 0.50D$ |
| Anisometropia | $\geq 0.50D$ |
| Spherical Myopia | $\geq 0.50D$ |
| Myopic Astigmatism | $\geq 0.50D$ Myopia; $\geq 0.50D$ ATR astigmatism |

The questionnaire of McKeon et al, known as the Vision Quality Scale (VQS), determines presence of symptoms by a 9-item quality of vision questionnaire. This questionnaire was developed as part of an NEI grant to analyze symptoms of patients with intermittent exotropia and validated by comparison to an established quality of life questionnaire. The vision symptoms addressed include headaches, eye strain, dry eyes, blurred vision, difficulties reading, and asthenopia. These symptoms are clinically associated with many accommodative and vergence dysfunctions such as convergence insufficiency or excess, divergence insufficiency or excess, and accommodative insufficiency, excess, or infacility. It is a criterion referenced test that has been used on several thousand subjects in research studies. Based on validation study results, patients scoring more than 84 are considered asymptomatic and those scoring less than 71 are considered symptomatic.

Utilizing symptoms based questionnaires, it is reasonable to modify correction Modified Prescription Guidelines whenever a person is symptomatic based on the questionnaire results. In this view, the Guidelines would be followed in prescribing lenses in all cases. However, whenever there were symptoms at an appropriate level (e.g., <71 on the VQS) a smaller power distance correction would be prescribed. The logic of this untested suggestion is that every attempt to relieve symptoms should be made, even when it might not be successful. Such a philosophy is consistent with the attempt in clinical practice to relieve a patient's

symptoms with any correction that will not cause them harm. This philosophy leads to the recommendations in Table 3.

TABLE 3.
Symptom Based Refractive Prescription Guidelines

| Refractive Finding | Asymptomatic (VQS >71) | Symptomatic (VQS <71) |
|-----------------------|---|---|
| Spherical Hyperopia | ≥1.00D | ≥0.75D |
| Hyperopic Astigmatism | ≥0.50D Hyperopia; ≥0.50D ATR astigmatism | ≥0.50D Hyperopia; ≥0.50D ATR astigmatism |
| Astigmatism (WTR) | ≥0.75D | ≥0.50D |
| Astigmatism (ATR) | ≥0.50D | ≥0.50D |
| Anisometropia | ≥0.50D | ≥0.50D |
| Spherical Myopia | ≥0.50D | ≥0.50D |
| Myopic Astigmatism | ≥0.50D Myopia; ≥0.50D ATR astigmatism | ≥0.25D Myopia; ≥0.50D ATR astigmatism |

Prescription of Added Lenses (Bifocals) and Prism

After considering prescription of a distance correction it is often obvious that additional forms of optical correction might be required. For example, the eye doctor anticipates that the patient with a esophoria (eye crossing) that only occurs at near will achieve resolution of symptoms with prescription of a bifocal so that less focusing is required when the patient looks at near. Similarly, it is hoped that an accommodative (focusing difficulty) will also be relieved with a near bifocal. Additional correction in the form of prism is often important when the eyes misalign horizontally or vertically.

Added Lenses

Added lenses are often prescribed when the person has a near esophoria (eye crossing a near) and normal distance eye alignment. In this instance, a near addition of +1.25 can be considered in almost all cases with confidence that it will give some or total relief of the symptoms. The logic behind this correction is based on the link between focusing and eye alignment known as the accommodative convergence to accommodation (AC/A) ratio. Table 4 lists possible ocular alignments at distance and near which lead to increasing magnitudes of AC/A ratios. The effect of a near bifocal addition of +1.25 is then shown for each AC/A ratio. As can be seen, an “arbitrary” bifocal power of +1.25 has a significant effect in each case. This suggests that, for most persons who need a near correction, prescription of +1.25D at near will assist ocular alignment significantly. In most cases it is

important to prescribe these lenses in bifocal form. This is especially true for school children as they are otherwise forced to remove their glasses each time they want to look from distance to near. This is typically not productive for most students.

| TABLE 4. | | | |
|--|-------------|------|------------------------------------|
| High AC/A Prescription Guidelines | | | |
| Distance Phoria | Near Phoria | AC/A | Near Phoria with Bifocal of +1.25D |
| Ortho | 5 eso | 8/1 | 5 exo |
| Ortho | 10 eso | 10/1 | 2.5 exo |
| Ortho | 15 eso | 12/1 | Ortho |

Added lenses are also prescribed when the person has a near accommodative (focusing) problem and normal eye alignment at distance and near. This often occurs when a person does not focus accurately at near which can happen in spite of an otherwise normal appearing ocular system. Using an objective measure of focus at near (MEM near retinoscopy) Rouse et al⁸ demonstrated that normal focusing at near is about 0.33D behind the target. Their findings also suggest that a person who focuses 1.00D behind the target is significantly different from normal. Findings by Rouse and others have led to the clinical suggestion that a near addition of +1.00 to +1.25 can be considered in almost all cases when a person focuses inaccurately. The clinically observed, but untested, result is some (or total) relief of the symptoms. Again, in most cases it is important to prescribe these lenses in bifocal form, especially for school children.

Prism

Prism is often considered when a person has a hyperphoria (one eye tends to go up) or a distance esophoria (eye crossing a distance). Wick and Surdacki⁹ suggested that 10-20% of young adults have a clinically significant hyperphoria and Tait¹⁰ found that distance esophoria occurs in about 1-2% of people. Unfortunately, prism prescriptions are avoided by many practitioners – these doctors are concerned about prism adaptation which occurs when the patient adapts to the prism and then requires additional prism of the same amount as the original. Schor¹¹ and Henson et al¹² demonstrated that prism adaptation occurs for patients with normal binocular systems but not for patients who have abnormal binocularity. This suggests that symptom based prescribing is ideal for determining which persons might benefit from prism prescription. Recall that, when tested with the Vision Quality Scale (VQS), patients scoring more than 84 are considered asymptomatic and those scoring less than 71 are considered symptomatic. Using symptoms as a guideline, prism would be prescribed without concern for prism adaptation whenever a patient scored less than 71 on the VQS.

The amount of vertical prism to prescribe in hyperphoria can be easily determined by vertical associated phoria measures (prism to reduce vertical misalignment to zero on a vectographic or other test – zero vertical fixation disparity [FD]). Morgan¹³, Rutstein et al¹⁴, and Wick¹⁵ have each demonstrated that such a prescription is helpful in reducing symptoms of symptomatic patients. The amount of base out prism prescribe in distance esophoria can be easily calculated by dividing the distance esophoria which remains after best distance correction has been prescribed by three. Thus, if the distance esophoria with best refractive correction is 3eso the prescription would contain 1 base out.

Symptoms Based Prescription Guidelines

Taken together, the prism and added lens guidelines can be combined with symptoms based refractive correction prescribing. These lead to suggestions for determining the optimum optical correction for a given patient. Such a prescription is grounded in sound science and based on the patient’s symptoms. As a result, the recommendations in Table 5 should provide the most likely optical prescription for symptom relief.

| TABLE 5. | | |
|--|---|---|
| Symptom Based Prescription Guidelines | | |
| Refractive Finding | Asymptomatic (VQS >71) | Symptomatic (VQS <71) |
| Spherical Hyperopia | ≥1.00D | ≥0.75D |
| Hyperopic Astigmatism | ≥0.50D Hyperopia; ≥0.50D ATR astigmatism | ≥0.50D Hyperopia; ≥0.50D ATR astigmatism |
| Astigmatism (WTR) | ≥0.75D | ≥0.50D |
| Astigmatism (ATR) | ≥0.50D | ≥0.50D |
| Anisometropia | ≥0.50D | ≥0.50D |
| Spherical Myopia | ≥0.50D | ≥0.50D |
| Myopic Astigmatism | ≥0.50D Myopia; ≥0.50D ATR astigmatism | ≥0.25D Myopia; ≥0.50D ATR astigmatism |
| Accommodative Problem | No near addition OR Distance correction with near addition of +0.75 | Distance correction with near addition of +1.25D |
| High AC/A (eso at near only) | Distance correction with near addition of +1.25D | Distance correction with near addition of +1.25D |
| Distance Esophoria | | Base out prism =1/3 phoria |
| Hyperphoria | | Prism to reduce FD to zero |

Conclusion

Vergence and accommodative problems are among the most common visual disorders of prepresbyopic patients. Results of Dwyer and Wick suggest that a substantial proportion of the population undergoes a passive change in vergence or accommodative status with prescription of spectacles of optimum power. All practitioners need to assess vergence and accommodative function as routine procedure, whether or not a refractive correction is to be prescribed. Patients who require a refractive correction and have concurrent vergence or accommodative anomalies can be prescribed lenses based on the standards above. These patients then need to be reviewed after one to three months to determine the need for further care.

References

- ¹ Dwyer P. The prevalence of vergence accommodation disorders in a school-age population. *Clin Exp Optom* 1992, 75:10-18
- ⁴ Blum HL, Peters HB, Bettman JW. *Vision Screening for Elementary Schools: the Orinda Study*. Berkley:University of California Press 1968
- ⁵ Dwyer P, Wick B. The influence of refractive correction upon disorders of vergence and accommodation. *Optom.Vision Sci.* 72;4:224-32
- ⁶ McKeon C, Wick B, Aday L, Begley C. A case-comparison of intermittent exotropia and quality of life measurements. *OptomVision Sci* 74(2): 105-110, 1997
- ⁷ Crane A, Wick B. Preliminary assessment of the relationship between classroom symptoms and eye movements measured using the Visagraph II. *OptomVision Sci (Suppl)* 1999 Dec; 76:131
- ⁸ Rouse MW, Hutter RF, Schiflett R. A normative study of the accommodative lag in elementary school children. *Am J Optom Physiol Optics* 61: 693-7, 1984
- ⁹ Surdaki M, Wick B. Diagnostic occlusion and management of laten hyperopia. *Optom Vision Sci.* 68(4):261-9, 1991
- ¹⁰ Tait EF. *Textbook of Refraction*, Philadelphia. WB Sanders,1951
- ¹¹ Schor C. Analysis of tonic and accommodative vergence disorders of binocular vision. *Am J Optom Physiol Optics* 60:1-24, 1983
- ¹² Henson DB, Dharamski BG, Oculomotor adaptation to induced heterophoria and anisometropia. *Invest Ophthamol Vis Sci.* 22:234-40, 1982
- ¹³ Morgan MW. The Turville binocualr infinity balance test. *Am J Optom Arch Am Acad Optom.* 26:231-9, 1949.
- ¹⁴ Rutstein R, Eskridge J. Studies in vertical fixation disparity. *Am J Optom Physiol Optics.* 63;639-44, 1986
- ¹⁵ Wick B. Prescribing vertical prism: how low do you go? *J optom Vis Devel* 28(2); 77-85, 1997

Forms

Lions-Crane Functional Vision Checklist

Give the Lions-Crane Functional Vision Checklist to students second grade and older.

Name _____ School _____ Date _____

Grade _____ Teacher _____ Glasses: yes _____, no _____

Lions Crane Reading Program Screening

| <u>To be filled out by student or parents.</u> | | | | |
|---|--------------|---------------|---------------------|---------------|
| Vision Screening | Never | Seldom | Occasionally | Always |
| 1. Headaches after reading or writing? | | | | |
| 2. Words run together, wiggle or you see double? | | | | |
| 3. Burning, itching or watery eyes? | | | | |
| 4. Slow copying from board? | | | | |
| 5. Reading and writing too close? | | | | |
| 6. Uses a finger to keep place? | | | | |
| 7. Tilts head? | | | | |
| 8. Words appear blurry? | | | | |
| Total | | | | |
| | | | | |

Students who report “occasionally” or “always” on any question need to be referred to an optometrist. Their eyes are fighting with each other causing these symptoms. It could be acuity, eye teaming, or an alignment problem.

Dr. D. H. Hubel, “If an ophthalmologist or optometrist tells you nothing can be done about binocular dysfunction, find somebody else who’s more open.” *Journal of Behavioral Optometry*. Volume 17/2006/Number 4. Dr. Hubel won the Nobel prize in 1981 for his work *Processing of Visual Information by the Brain*.

Lions-Crane Academic Allergy Checklist

Name _____ School _____ Date _____

Grade _____ Teacher _____ Glasses: yes _____, no _____
 (To be filled out by the teacher)

| Academic Allergy Screening | | |
|--|------------|-----------|
| <i>To be filled out by teacher.</i> | | |
| | Yes | No |
| 1 Good days and bad days? | | |
| 2. Louder than other students?* | | |
| 3. Reverses letters? | | |
| 4. Leaves out obvious sounds while spelling? | | |
| 5. Can't hop, skip or jump rope, clumsy?* | | |
| 6. Slow turning in assignments? | | |
| 7. <u>Over-active</u> , always moving? | | |
| Total | | |

*Students with these two symptoms probably had ear infections, were given antibiotics that killed the good bugs in their stomachs and as a result developed a yeast infection that causes allergies.

ALLEN & VIRGINIA CRANE

While the Cranes were working as elementary school counselors in Farmington, NM, first grade teacher Mrs. Winters would meet Allen Crane at the door every day demanding to know why Sheila could not learn to read. Allen kept telling her the child had failed the Bender Gestalt Perception test. Mrs. Winters would ask, "What do we do about it?"

"I don't know," was his reply. While reading everything he could get his hands on concerning the subject, Allen Crane learned that Dr. Howard Walton, an optometrist in Culver City, California, could correct vision perception problems. After flying to Culver City and talking with Dr. Walton one weekend, Allen Crane had an answer for Mrs. Winters the next Monday. Dr. Walton had told him about the importance of proper desk height and the perception and gross motor program developed by the Winter Haven Lions Club Foundation in Winter Haven, FL. Sheila's problems were corrected in six weeks, and she did learn to read. For 25 years, the Cranes continued to seek ways to help students become more efficient readers.

In 1997 Allen Crane and his wife, Virginia, wrote *Buzzards To Bluebirds* because they thought they could help at least 70% of students in any classroom learn to read more proficiently. Since 1997, Allen and Virginia have fine-tuned the system and they now believe up to 100 percent of children can be helped to read, write, and think more proficiently, usually in one semester. They have given their program to the Lions Clubs of New Mexico, in the hope it will live forever under the Lions' motto "We Serve."

Lions Clubs in New Mexico have adopted the Lions Crane Reading Program (LCRP), incorporated it (i.e., the Lions Crane Reading Program Foundation), and it has now received a 501c3 status. In 2004, New Mexico Governor, Bill Richardson, issued an executive proclamation that designated September 5-11 as LIONS VISION AWARENESS WEEK in the state of New Mexico with emphasis on LCRP. In July 2005, the Cranes were nominated for an award at the Lions International Convention in Hong Kong for the Lions Crane Reading Program being chosen as one of the top three Lions' service projects in the world. With over 45,000 Lions Clubs in 193 countries throughout the world, that is quite an honor. The Cranes, together with the Lions Clubs of New Mexico, envision the Lions Crane Reading Program to be a signature project that Lions Clubs all over the world can adopt in an effort to significantly reduce, if not eliminate, global illiteracy.



VIRGINIA AND ALLEN CRANE WITH 2004-05 LIONS CLUBS
INTERNATIONAL PRESIDENT CLEM KUSIAK (CENTER)