# Developmental Optometry

A field with enormous implications for helping kids with learning problems is Developmental Optometry. You may want to refer learners for testing if you suspect that some of their problem with reading/writing is that they are having these types of vision problems.

Developmental/behavioral optometrist and researcher Robert Lederman works in Israel, diagnosing and treating vision/brain problems that affect reading ability, beyond those handled by standard optometrists.

Robert Lederman's Vision Center is located at Keren Hayesod 19, Jerusalem, phone: (02) 623-4888, Email: info@ledermanvision.com . The Vision Center website, where you can see further details and read success stories of people whom he has diagnosed and treated, is <http://www.ledermanvision.com/english/home.php>. Dr. Lederman lectures periodically, in English or Hebrew. Call the office for dates of upcoming lectures.

There are additional vision and focus experts and therapists working in Israel.
Hana Kaplan in Tel Aviv (Bavli) is a leading expert in the field, phone: (03) 546-6550.

Lederman says that a significant proportion (60%) of children who have learning problems also have vision problems, EVEN IF they have “20/20” or “6/6” vision. Many of these vision problems are currently going undiagnosed and untreated because there are not enough people with the skills to diagnose and treat them. He passionately believes that we could save these kids, their families, and the education system a lot of aggravation, and help the kids to fulfill their potential far more effectively, if we would identify and correct these vision problems early on. He describes and gives vivid demonstrations of a full range of visual functioning problems: visual processing and eye teaming, focusing, and tracking. He makes some extremely persuasive points:

-         He uses a metaphor: If a computer is not working, either the keyboard or the processing unit could be broken. The first thing to check is the keyboard to verify that information is being delivered correctly to the processing unit. The input device is easier to fix. If you fix the keyboard first, you get an accurate assessment of the processing problem.

The parallel is that kids who, for example, are farsighted or having eye teaming or tracking problems may get headaches when they try to focus on a book, so they get restless if they try to do it for long, and their handwriting is a mess – which appears to teachers, doctors, and parents as a short attention span. They are misdiagnosed as ADHD and put onto Ritalin too soon, when vision correction could solve the problem.

One can look through lenses to get the feeling of what the child experiences; I wouldn’t read either if my eyes and brain were under that kind of strain.

-         The only standard vision tests done in school are distance vision: can the child read the board? This does not identify whether the child can properly focus up close for reading or writing, or can switch back and forth from distance to close-up focus, as is required in a classroom.

-         Ophthalmologists and neurologists do not necessarily know how to do this diagnosis and vision therapy. They may not check for all the possible types of vision problems, and therefore miss some.

-         There is evidently a lot of controversy and resistance to the kind of evaluations he does, for the usual reasons: vested interests, cost, lack of research results.

This type of vision testing and therapy should be expanded in Israel. Lederman says that optometrists need training in what to look for and how to correct it. Once qualified optometrists are in place, they can carry out a program of screening and therapy.

There are a number of web sites where you can research the subject further:

<https://www.covd.org> (College of Optometrists in Vision Development) – type the link into your browser: covd.org.

<https://www.allaboutvision.com/parents/>  -“ If your child is struggling in school, having difficulty reading, or finding it hard to remain on task, the cause may be an undetected vision problem, even if your child's eyesight is 20/20.  The goal of this web site is to educate parents and teachers about frequently overlooked vision problems in the hopes of helping those children who struggle unnecessarily because of undiagnosed vision disorders.  In fact, many of these children are often suspected of having learning disabilities, dyslexia, or attention deficits when the real culprit is their vision.  We invite you to explore the information presented in this site to learn more."

<http://www.besthomeschooling.org/articles/vision_skills.html>  - "A person who has vision skill deficiencies might see letters doubled, jumbled, moving around, or falling off the edge of a page. Some words might be missing completely! He might even see the letters clearly and perfectly in place, but his brain might not process what he sees into anything meaningful. There might be perfectly good vision for things across the room, but difficulty up close. A child with vision skill problems will usually assume the words on the page look the same to everyone, but that he's just not good at decoding them. An eye test might show that the person has 20/20 vision; but that's only one small measurement of how vision is working. Besides having 20/20 acuity, we need to have a smoothly working vision system, which is a very complex system of dynamics.”

"During the initial screening test, the developmental optometrist found that he had excellent reading skills, but had to work very hard to process information as his eyes tracked across the page. After two dozen sessions of therapy, it became obvious that things were chaning dramatically. He was suddenly drawn to and reading thick, adult level books with fine print. He started picking up books around the house and devouring them. He noticed how curiously large the print seemed in the fourth and fifth grade level books he had read before, and commented that they “don't have much in them.” That was over four years ago, and he's continued to be a voracious reader ever since." "Current research indicates that approximately 1 of every 4 children has learning related vision skill problems. The National Society for the Prevention of Blindness estimates that 10 million children in the United States have undiagnosed vision problems. Research also shows that 7 out of 10 juvenile delinquents have undiagnosed vision problems. Teachers, and even parents, often label kids as lazy, unmotivated, looking for attention, or learning disabled when, in fact, undetected vision problems are at the root of their difficulties. Children who seem to be struggling with learning that involves the visual process (reading, writing, math, etc.) need to have comprehensive, learning-related vision exams."

[www.OEP.org](http://www.oep.org/) (Optometric Extension Program): " Symptoms of Vision Disorders: Blurred vision, sleepiness when reading, reluctance to drive, covering one eye, head tilt, blind spots, floaters, double vision, dizziness, problems with depth perception, poor memory, needing to re-read frequently, and problems with eye tracking all could potentially indicate a vision disorder. Left untreated, symptoms can cause frustration, anxiety, fatigue, and lower quality of life."