

SCHOOL ACHIEVEMENT AND VISION

Many schools and parent groups render a valuable service by conducting preventive education and vision screening programs for school children. The value of these screening programs is unquestionable, even though the best school programs fail to detect all children who are in need of professional care and sometimes refer those whose vision is adequate. Every school should offer the best screening program possible within the limits of available resources.

The limitations of testing a child's vision at six metres as a sole criterion for vision screening are well known. Numerous other tests have been developed and are readily available for school use to help determine which children need professional care. An important part of any screening program is the observant parent or teacher who watches for symptoms of vision problems, particularly while the child is reading.

Symptoms to watch for

- Losing place while reading
- Avoiding close work
- Body rigidity while looking at distant objects
- Holding reading material closer than normal
- Moving head excessively
- Tilting head to one side
- Rubbing eyes
- Thrusting head forward
- Headache
- Tension during close work
- Little or no voluntary reading at home
- Poor sitting posture or facial distortions while reading frowning, excessive blinking, scowling, squinting

In general, any child in the lower third of the class should have a complete eye examination, particularly if the child seems to have the ability to achieve a higher level. A child who is not working within reasonable limits of his or her own capacity should also have a complete vision examination.

Vision examination

Modern optometry is based on the concept of functional vision. This takes into account not only the shape of the eyeball but also the entire vision process, both physiological and psychological.

Any complete vision examination for a child cannot be done hurriedly. It may take an hour, and sometimes more than one visit, for all the necessary tests.

A case history is an essential part of a child's vision examination. It should include symptoms observed by parents and teachers, general health history, developmental history and the child's attitude towards school and play activities.

There should be a thorough examination for eye disease.

Both the examination and the correction provided should be appropriate for the actual use of vision in usual everyday tasks.

Correction

For refractive errors such as shortsightedness (myopia), longsightedness (hyperopia) and astigmatism, conventional spectacles or contact lenses for the older child are usually prescribed. Lenses may also be prescribed to enable the child to function with greater ease and efficiency.

Vision therapy or orthoptics is the answer to many problems of muscle imbalance where the two eyes do not work together as they should. Vision therapy is often used to correct crossed eyes (strabismus) and sometimes to improve the vision of a lazy eye (amblyopia).

The optometrist's advice should be followed on how to use the eyes, on when to wear spectacles (for example when reading or playing, or for school work) and on proper light and posture for close work. All of these are important in correcting vision problems.

With the aid of modern science, all but a few children can have their vision brought up to par. Few health problems respond so completely to proper professional care.

Elements of good school vision

- Near vision—the ability to focus and see clearly and comfortably with both eyes and each eye separately at a distance of about 40 centimetres. This is the distance at which most school desk work is done.
- Distance vision—the ability to focus and see clearly and comfortably with both eyes and each eye separately for a distance of six metres or more. Distance vision is necessary to see the blackboard, to enjoy films and television and to engage in sport.
- Binocular co-ordination—the ability to make the two eyes work together, which is necessary for art work, handicrafts and play activities and to read efficiently.
- Adequate field of vision—the ability to see both sides and up and down while focusing on a small target. This saves unnecessary eye and head movements and is essential for participation in sports and for personal safety.

These and many other requirements for adequate vision must be considered in a complete vision analysis, especially for the school child. Because most school tasks are performed within arm's length, it is not enough to determine whether a child can read the chart at six metres, or to prescribe corrective lenses to bring the child up to that ability. How well children's visual capabilities are geared for all of the normal demands made on them, particularly the need for sustained nearpoint vision performance, must also be determined.

Vision screening

Optometrists Association Australia recommends a complete professional visual examination before a child enters kindergarten, and then regular check-ups to provide maximum preventive care and early correction.

Importance of vision

More than 80 per cent of all school tasks are based on vision. Vision is the key to a child's whole development, according to the Gesell Institute of Child Development. Not only school achievement but personality, posture and adjustment to life are closely integrated with vision development.

Many slow readers have neglected vision problems.

While correcting a child's vision problem may not automatically improve performance in school, it can remove an obstacle that was preventing the child from achieving his or her potential.

Homework corner

School children should have a suitable place for homework—a corner, if not a room, that is their own. It should be comfortable and attractive and a place they like.

There should be even lighting, without glare and large dark areas. If possible, the room should be painted in light pastel colours that reflect rather than absorb light.

The chair and table should be the correct size for proper posture.

Small children should have reading matter with large sized type—the smaller the child, the larger the type.

Children below the third grade should not concentrate on close work for more than 15 or 20 minutes without looking up to relax their eye muscles and whole bodies.

Ask your optometrist for these related brochures

- Parents' guide to children's vision
- Spectacle corrections for children
- Visual skills important for children

This brochure is produced by the Australian Optometrical Association
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