**Eye Movement Skills (Ocular Motility)**

Good eye movements are essential for accuracy and speed in reading. Visual inspection and scanning of visual material relies on easy, effortless, and efficient eye movements. The child must obtain the most information with the least effort.

Problems in this area of visual performance can be identified whilst the child is performing close work tasks. Eye movements that are slow, clumsy or ‘stutter’ will reduce the child’s efficiency.

Clinically significant problems will become worse when the child is required to spend longer times performing close tasks. Often the child avoids demanding close tasks and head movements during reading increases. Attention span for near tasks decreases whilst fatigue and fidgeting at the desk increases.

**Eye Teaming Skills (Binocularity)**

The paired eyes and their muscles allow a degree of teaming. The two eyes perform almost like one. The skill of using the eyes together (binocularity) is learned in the preschool years. Poor performance in this skill can result in poor judgement of spatial relationships, orientation, and depth perception. More importantly, this affects the immediacy of clear single vision for many objects in the classroom.

Problems in this area will contribute to general clumsiness in class and in the playground. Squinting, blinking and odd postures will attract the teacher attention.

Clinical problems will manifest as decreasing competency in visually demanding near tasks. The child will often show a preference for listening and verbal tasks.

**Eye to Hand Co-ordination Skills**

Ability and proficiency in this area of performance depend on the use, practice and integration of the eyes and the hands as paired learning tools. The abilities to visually discriminate the size, shape, texture and location of objects emerge from these experiences.

Producing drawn and written symbols depend on the skill and accuracy of eye to hand co-ordination. Developmentally this stage precedes the visual interpretation of words and numbers in texts and workbooks.

This child’s dependence on hands for inspection and exploration of materials when others would simply look can suggest difficulties in this area.

**Visual Perception (Visual Comparison, Visual Imagery, Visualisation)**

The child’s first symbols are images and pictures that allow a mental hold on fleeting reality. This skill of visual imagery allows the child to relate primary experiences to the pictures and words on the printed page. These combined skills provide perceptual information that permits translation of object size, shape, texture, location and distance, and solidarity into understandable pictures and words. Visual form perception provides immediate and accurate discrimination of visible similarities and differences that allow appropriate actions to be taken.

Poor memory or carelessness is often blamed for problems in these areas. Furthermore, the difficulties in these areas will result in reversal of letters or forms and/ or letter sequences in words that are not phonetically specific. Repeated practice may not result in improvement and written work, and drawing may continue to be a problem.

Lack of visual skill hinders all academic areas particularly spelling and writing. It should be noted that Reception and Year One children will not demonstrate a high level of skill in these areas.

**Refractive Skills**

**(Short-, Long-Sightedness etc)**

Distortions of visual space due to refractive problems can change visual information. The child must continuously match visual with auditory and tactile signals; if the resultant information streams do not match vision will override auditory and tactile and comprehension will be lost. This results in avoidance of deskwork as well as the indicators found in the checklist.

It is important to note that reading the lowest lines on a test chart and passing a basic “sight” test does not necessarily mean that the vision is normal. Sight testing only checks how small a letter a person can see.

**Suggestions for using the checklist**

The checklist especially applies to all those entering school with a high degree of ‘school readiness’ or for those who have done well for the first few years and struggle once school becomes visually more demanding.

This checklist can assist in identifying students in later years whose achievements fall short of capabilities.

By casually observing all students in a class the teacher can recognise which students are not in immediate difficulty. The teacher can then observe the students with suspected difficulties more closely.

Checklist:

Teachers’ checklist of observable clues to classroom vision problems

Student Name: …………………………………………………………

Date: ……………………………………………………………………………

Appearance of eyes:

One eye turns in or out at any time Reddened eyes or eye lids Eyes water excessively Encrusted eyelids Frequent styes on lids

Complaints when using eyes at desk:

Headaches in forehead or temples Burning or itchy eyes after reading or desk work Prints blurs for a short time Complaints of seeing double Words ‘move’ or ‘swim’ on the page

Behavioural signs of visual problems:Eye Movement Ability (Ocular Mobility)

Head turns while reading across the page Loses place frequently during reading Needs finger or marker to keep in place Short attention span for reading or copying Frequently omits words Writes up or down hill on paper Re-reads or skips lines unknowingly Orientates drawings poorly on the page

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**Vision in the Classroom**

This checklist has been designed to help teachers and parents identify the visual signs and symptoms that can and do interfere with a child’s academic progress at school.

It is important to note that reading the lowest lines on a test chart and passing a basic ‘sight’ test does not necessarily mean the vision is normal. Sight testing checks how small a letter a person can see. Vision however results from active interpretation and reaction to information made available through the eyes. The informed teacher and school nurse can often make the best observations and judgements on visual performance, which may be interfering with the teacher’s best efforts in the classroom. Intervening early, before the visual difficulties become more severe and cause real problems with reading and academic performance, can make a real difference.

The expert observational skills of teachers make them ideally suited to spot the behavioural changes in their students that might suggest that individual intervention by a Behavioural Optometrist could be beneficial.



 A Guide to Vision in the Classroom

For Teachers and Parents



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