Management strategies for learning related vision problems

After identifying the learning related vision problems, individualized treatment plan on refractive error correction and vision training plan on visual efficiency and visual information processing will be prepared by the optometrist. Vision training includes office training and home training. The treatment period varies, could be several months or more.

Do my child have learning related vision problems?

If your child has any of the symptoms below which have obviously affected their daily activities or learning, he or she may need a learning related vision problems assessment.

For more information or to make an appointment, please contact The Optometry Clinic, The Hong Kong Polytechnic University.

Enquiry:	https://polyu.hk/FkIBM
Tel:	(852) 2766 5225
Email:	optclinic.appt@polyu.edu.hk
Address:	A034, The Optometry Clinic, The Hong Kong Polytechnic University
Website:	https://www.polyu.edu.hk/so/
Web booking:	https://ocwb.polyu.edu.hk

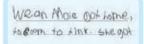**Scan QR Code for Chinese Version**

Symptoms

Blurry vision or double vision

Tired eyes or headache when reading or writing

A child that sees like this can pass a vision screening

Experiencing illusory text movement

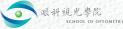Poor legibility, poor spacing or difficulty maintaining written work on printed lines

Difficulty in ordering numbers or letters

Reverses or rotates letters, numbers or words e.g. "b" and "d", "net" and "ten"

LEARNING RELATED VISION PROBLEMS

The Ability To Learn And Read

The ability to learn and read is becoming more crucial for academic and career development in modern society.

- About 80% of what we learnt comes from visual processing of information.
- Vision involves not only our eyes but also our brain to process and integrate the visual information.

A timely diagnosis of learning related vision problems is important to:

- provide intervention minimizing the adverse effect;
- facilitate the learning process and enhance quality of life.

Learning related vision problems comprise three major components in our visual system:

Visual Information Processing

- Visual spatial skill
- Visual analysis skill
- Visual motor integration skill
- Rapid naming and oculomotor skill

Visual Efficiency

- Binocularity (eye teaming skills)
- Accommodation (focusing amplitude, accuracy & efficiency)
- Convergence (align eyes at near work)
- Stereopsis (3D vision, depth perception)
- Ocular motility skills (fixation, following eye movements, rapid change of fixation)

Visual Integrity

- Refractive errors and eye health

Most comprehensive eye examination covers the assessment of "Visual Integrity" and "Visual efficiency". In addition, The Optometry Clinic in PolyU provides "Visual perception assessment" service to examine the 'Visual Information Processing' functions in children.

Visual Perception Assessment* includes:

Tests Of Visual Spatial Skill

Test Of Visual Motor Integration Skill

Tests Of Visual Analysis Skill

Test Of Rapid Naming and Oculomotor Performance

*Optometrist may modify the test items according to individual needs and ability. The whole assessment will last for 1.5 to 2 hours.

The performance in each test will be compared with the age-matched norm value to assess the child's level relative to the normal population of the same age. To let the parents understand the visual perception functions of their child, a visual perception report will be prepared by the optometrist 2 weeks after the assessment.