Movitext – an Efficient Pre-optical Training Method for Eccentric Readers
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Krister Inde, MA in spec ed
• Innovator of low vision rehabilitation in Sweden
• "Low Vision Training" 1975
• Synkliniken (Vision Clinic)
• Low Vision Enabling, Lund University
• Leber’s Disease with CFL since 1966

The Four LV Groups
• Central scotomas and
  VA <20/200 (<0.1)
• Abnormal nystagmus
• Peripheral restrictions
• Low visual acuity and 20/200 – 20/60
  (0.1 - 0.3)

The Normal Reading Process
• Normal reading involves small, fast movements of the eyes with pauses.
• Reading takes place during the pauses, between the saccadic eye movements.
• Pauses are called fixations.
• Fixations involve 95% of the reading process.
• The wider the fixation field, the faster you read, since a wider fixation field contains more characters/fixation.

The Low Vision Reader…
• Persons in the first three groups must learn new behaviours in order to use optics and devices according to the (new) conditions of the eyes.
• New techniques involve training – low vision training.
• Trial-and-error is an alternative

The Eccentric Club – Who are the members?
• Visual acuity < 20/200 (<0.1)
• Central visual field loss as a defined scotoma
• Normal retina in the periphery
• Normal eye movements
Eccentric Viewing

Should fixate above or below the central scotoma when they read.

Eccentric Fixation Demands Magnification

- Compensate for the lower density of cones outside of macula with high magnification 8X or more in a frame.

Eccentric Viewing Training Lesson One

- Fixate above (or below) the line of text in order to avoid the central scotoma.
- The optimal eccentric fixation angle is just outside the central scotoma.
- Move the text in front of the best eye, maintaining the focal distance and the eccentric fixation angle.
- Start with single words and word lists with fixation lines.

Fixation Lines Training

------------------------------------------------------------
green come over
------------------------------------------------------------
sober event roman
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Eccentric Viewing – Continued Training...

- Avoid the central scotoma – concentrate on fixating above or below the line of text.

Calculating the Eccentric Distance From the Text

\[ \tan \theta \times d = x \]
Calculation of My Eccentric Distance From the Text
\[ \tan 7^\circ \times 25 \text{ mm} = 4 \text{ mm} \]

Purpose of Training
Find and train PRL for reading
Preferred retinal locus, PRL

Move the text with MoviText
- ZoomText /Doc Reader/ Ticker Mode Version 7.1
- Ctrl/Shift/R in Word mode

Can MoviText help you?
MoviText makes the text movement easier when training eccentric viewing. Like this:

Efficient assessment and training
- First session Optometric assessment and introduction to training
- Second session Optometric adjustment of devise
  Reading test A
  Training with MoviText
  Reading test B
- Home training
- Third session Reading test C
  Training MoviText and fixation lines
  Reading test D

Reading speed
What's the Purpose? Goals to Reach…

• Training eccentric fixation takes two to three months…
• …reading speeds up to 150 w/m.
• Good reading perseverance, possible to read for half an hour, most important for quality of life.
• Find the right magnification and devices for different tasks.
• Microscopic lenses and CCTVs for reading and close-up work.

Contact

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