

# Curricula for Games on XerTrainer Used During Optometric Vision Training

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## Introduction



Ever since XerTrainer was implemented in my office in 2004, I have found various uses for this product. Most importantly, I have used it as an integrative tool as a part of my visual perceptual vision therapy. Younger patients as a rule work on XerTrainer. Patients with deficiencies in laterality, directionality, gross motor, visual-motor organization, and visual-motor integration have been targeted for training on XerTrainer. Patients with these diagnoses often exhibit isolated symptoms including poor handwriting, letter and number reversals (often referred to as dyslexia), and poor eye-hand coordination. Patients with visual tracking problems (pursuits and saccades) can also benefit from XerTrainer.

## Exercises

Specific uses of XerTrainer varies depending on the severity of the diagnosis, and the patients affinity to perform various tasks on XerTrainer. Typically, two 120 second consecutive runs are performed. Patients are urged to improve upon their first score. Often, patients are introduced on the " Follow the Tune" level. However, skilled patients quickly outgrow this level as the board is too slow to respond to hand hitting of XerTrainer.

It should be pointed out that most of the procedures are done with hand hitting rather than ball hitting. This allows for a quicker integrative response to achieve desired therapeutic goals. Also, it should be noted that this use is more conducive to optometric offices. Laterality / directionality patients are instructed to use left hand on left side and right hand on right side lights. Crossovers are not permitted. More difficult levels are used as patients improve.

## Special Exercises



- Game 4-level 3 is the primary game we use on patients for two reasons. Firstly, short patients don't have to hit #3 or #5 lights at the top. Secondly, it prohibits the patient from hitting the same light twice in a row. This fact increases the difficulty of the visual-motor task. 4-3 doesn't penalize patients for hitting the incorrect light.
  - 4-4 is the next level of difficulty. We like to use this exercise because there is a penalty component for hitting an incorrect light.
  - 4-1, 4-2, 4-5 and 4-6 are too difficult for smaller patients because they require the patient to hit the top lights, #3 and #5.
- 4-7 and 4-8 are too easy as the pattern can be accomplished in the 1-4-6 board light triangle.
- Level 2 is "Find the Tune". It is a good exercise for multi-sensory integration training, namely visual-auditory processing.

- 2-1 is indicated for shorter patients as #1 is the highest light necessary to hit, although #3 and #5 lights can also be integrated.
- 3-4 is an excellent game for adults and tall patients. However it would be more challenging if a "penalty" component would be introduced, as in 4-4.
- Game 1 and game 3 on all levels are not useful for short patients.
- 1-2 and 1-3 are not representative of any skill level because the patient gets credit even when they hit lights that aren't lit up.
- All level 1 is not useful for in-office vision therapy.

### **Suggestions for Use in the Optometric Community**

All serious vision therapists would benefit from XerTrainer in their office. Most part time vision therapy offices would also obtain a higher profile with acquisition of XerTrainer. This would allow their practices to expand and grow.

A vision therapy manual accompanying XerTrainer is a key component to successful and proper usage. This would require much thought and preparation. An available consultant would also add value.

### **Conclusion**

XerTrainer has become a useful and fun tool for patients with specific visual perceptual deficiencies. In fact, patients often ask if XerTrainer is going to be part of their vision therapy session for the day. XerTrainer is a definite aid and useful tool for effective and successful vision therapy.