

## Enhanced Low Vision Therapy for certified professionals. Tutorial

Syllabus for all courses in the series.

**Dr. Stephen G. Whittaker, Ph.D., OTR/L, CLVT**  
**Debra Sokol-McKay, MS, OTR/L, CDE, CLVT**

<b>Suggested Audience:</b>	This course is designed for practicing low vision therapists. VisionEdSeminars, the provider of this continuing education, is an approved provider of the American Occupational Therapy Association (AOTA) and the Academy for Certification of Vision Rehabilitation & Education Professionals (ACVREP). This course of study has been approved by ACVREP to meet the formal educational requirements for certification as a low vision therapist. Please check with AOTA as to whether it meets the eligibility requirements for a SCLV.
<b>Course Overview:</b>	<p>Historically, low vision rehabilitation has emphasized clinical tests and interventions that maximize vision and the use of optical devices. The <i>Enhanced Approach</i> builds on this knowledgebase to focus on a client's performance goals using a blend of visual and non-visual methods- whatever works- such as using screen magnification, optical devices, and text-to-speech on an iPad to locate and read a newspaper article or a combination of visual and tactile technique for basic food prep. Unlike clinical vision testing by eye-care providers with its focus on testing just vision, the "functional visual evaluation" involves assessment of visual task <u>performance</u> to identify visual, perceptual, and non-visual barriers to the performance goals. For example, instead of letter acuity or just word acuity used to test the visual resolution in clinical vision testing, the comparable "functional" test would be a standardized reading test like the MNRead that measures reading performance with different print sizes and estimates not only the minimum print size for reading but also the optimal magnification and maximum achievable reading fluency as well as the effect of central field loss. Since they involve objects and print used in everyday tasks, the <i>enhanced functional</i> vision tests are better able to predict the visual enhancement devices and strategies that will work the first time, eliminating costly trial and error. Being able to better predict working solutions also enables the therapist to meet the needs of people with cognitive impairment and depression who cannot tolerate the trial-and-error approach. The <i>Enhanced Approach</i> includes a <i>transdisciplinary model of care</i> where the low vision therapist, in collaboration with an eye-care provider, addresses not only reading goals but basic activities of daily living and mobility goals so that a client can continue to live independently while waiting for the services of any needed specialists who have been referred by the low vision therapist.</p> <p>Overall, this curriculum includes a series of 8 Modules that have been organized around 13 chapters in the self-study program developed to accompany the book: Whittaker, SG, Scheiman, M, Sokol-McKay, D. <i>Low Vision Rehabilitation: A Practical Guide for Occupational Therapists</i>. Slack; Thorofare, NJ, 2016. The program uses a problem-based approach where the student read the chapters, passes a test as part of the self-study, then in an assigned activity applies the material clinically using a case from our virtual clinic presented as videotapes of real patients Participants will not benefit from Webinars unless they have completed the assignments. The webinar enrollment is limited to a maximum of 15 participants assuring discussion and individualized instruction.</p>

©Stephen G. Whittaker 2021

	<p>The book and the tests include the following topics: 1) functional vision evaluation, 2) evaluations of occupational performance, 3) identification of visual, environmental and the more common cognitive, psychosocial barriers to occupational performance, 4) performance goals include basic independent living skills. Treatments include 1) use of optical and electronic devices including the latest in smartphone and tablet computer technology, 2) environmental modification, 3) adaptive techniques that maximize performance using both visual “low vision” and non-visual “blindness” techniques to achieve visual goals.</p> <p>The content of the courses is presented in the book and accompanying asynchronous online presentations that use video demonstrations and animations to update illustrate important methods and concepts. For most efficient learning, the experienced therapist might take the test first to help identify learning needs, then read the chapter and view the presentations and then retake the test after the webinar. The tests provide feedback including page references whether questions are correctly or incorrectly answered and, if incorrect, will direct the student to the pages in the chapter where the information related to the question can be found. When a score of 80% or higher is earned, a certificate of completion will be issued. Just retaking the test until is passed is possible but will not lead to effective learning.</p>
<p><b>Fees and tuition</b></p>	<p><b>The fee for the 9 webinars including the self-study (14 chapters) is \$US 1,250.</b> This course of study is equivalent to 1 university level 3 credit course</p> <p><i>We offer a guarantee of satisfaction or a full refund will be issued if the request is sent before 2 webinars are completed, thereafter ½ the tuition will be refunded per webinar. We ask that you email a reason for your refund request so we can improve our courses and delivery. All reasons will be accepted. Refunds will not be issued for missed webinars; however, make up assignments are possible. The certificate of completion will only include webinars that have been attended.</i></p>
<p><b>Materials required:</b></p>	<p>The follow equipment is a bare minimum for teaching and all but the last two items are used clinically. Considerable effort has been made to keep the costs of these materials to a minimum. This is why I do not offer a package from a vendor and have forgone all royalties.</p> <ul style="list-style-type: none"> <li>• The textbook: Whittaker, SG, Scheiman, M, Sokol-McKay, D. <b><i>Low Vision Rehabilitation: A Practical Guide for Occupational Therapists.</i></b> Slack; Thorofare, NJ, 2016.</li> <li>• An Ipad or Iphone (you can borrow one)</li> <li>• A metric ruler- a metal tape measure is recommended.</li> <li>• Two high quality hand-held magnifiers 8-10 diopters and 16 diopters (<a href="http://www.lssproducts.com">www.lssproducts.com</a>)</li> <li>• FRAST- functional reading assessment (<a href="http://www.lowvisionsimulators.com">www.lowvisionsimulators.com</a>)</li> <li>• 300 lumen flashlight (hardware store or ebay)</li> <li>• Photometer or photometer APP (free or very inexpensive) with readout in Lux.</li> <li>• Laser pointer (ebay)</li> </ul>

	<ul style="list-style-type: none"> <li>• Penlight and red-green glasses</li> </ul>
<p><b>AOTA and ACVREP approval, credits, and requirements:</b></p>	<p>For AOTA and ACVREP credits, participants must attend interactive webinars with preferably with video or participation. For written assignments, you must send it a copy after the webinar for credit. At the conclusion of the course of study you will be issued a certificate of completion for the webinars and written assignments. For asynchronous online courses, passing a test is required. You must download certificates of completion once you have passed the test. <b>There is no automatic reporting.</b> If your state requires direct reporting by the provider of continuing education, please contact <a href="mailto:visionedseminars@verizon.com">visionedseminars@verizon.com</a> and we report as needed. If all webinars, assignments and self-study chapters are completed, the total is 30 hrs. Partial credit is given for completed elements of this program</p>
<p><b>Supplementary materials</b></p>	<p>Online Course materials provided for download online</p> <ul style="list-style-type: none"> <li>• <b>Educational handouts for clients</b> for patients with instructions for sighted guide, glare, magnification, and compensatory scanning for field restrictions. These also provide a simple summary of interventions for the therapist.</li> <li>• <b>Vision evaluation forms.</b> These forms are in Word docx format and may be customized to your institution to provide efficient documentation, and guide the reasoning process.</li> </ul> <p><b>Advertising materials for your practice.</b> These forms are in Word docx format and may be customized to your institution.</p>
<p><b>General Test Format</b></p>	<p>The questions in the exam will be in the form used by the Academy of Certification of Vision Rehabilitation Professionals (<a href="http://www.ACVREP.org">www.ACVREP.org</a>) certification exam.</p> <p>Exams use multiple choice exams where multiple correct answers may be required. If more than one answer is required, then the stem of the question will indicate how many correct answers are required. Examination standards prohibit the use of negative phrasing (e.g., "Which answer is "not" correct?" or as possible answers "none of the above", "all of the above", or multiple answers like "A &amp; B are correct").</p>

## Instructional Objectives and Special Instructions

*Note that a separate certificate of completion will be issued for the additional hours earned for Webinars when the series is completed. Certificates of completion must be downloaded for each test passed for assigned chapter tests.*

### Module 1

A focus on performance goals using visual and non-visual interventions under a transdisciplinary model.

**Week 1:**  
(0.45, 3.5 hr, CEU)

- Chapter 1 Review (suggest take test first and focus on areas related to incorrect responses.) (2 hrs)
- Chapter 9 p 147-152 -no test
- **Interactive Presentation: (1.5 hrs)**

#### Instructional Objectives

The student will...

- Incorporate a transdisciplinary model of care into a treatment plan
- Describe the ACVREP scope of practice of low vision therapists.
- Name six different types of visual impairments, and common pathologies.
- Name performance signs associated with each type of sensory vision impairment (impaired visual acuity, contrast sensitivity, central field loss, peripheral field loss and oculomotor dysfunction) that may be used to screen for vision disability.

## Module 2

**Managing Psychosocial and Cognitive Issues Related to Vision Disability.**

**Week 2:  
(0.3.5 CEU, 3.5 hrs)**

### **Psychosocial and Cognitive Issues Related to Vision Disability.**

- 1) Online asynchronous presentation**
- 2) Chapter 6 & test (2 hrs)**

#### **Instructional Objectives**

The student will...

- In an analysis of a case, identify signs of the six psychosocial barriers to successful recovery from vision disability; 1. The type of vision loss and stage of coping, 2. Cultural and family reaction: caregiver dependence, 3. The life stage, 4. Other significant life events, 5. Patient's expectations and the stigma of blindness, 6. Self-concept, 7. Personality and develop a treatment plan.
- In an analysis of a case, identify signs of cognitive barriers to successful recovery from vision disability.
- Develop a treatment plan that includes steps in the success-oriented approach to treating psychosocial and cognitive impairments associated with vision rehabilitation.
- Develop an evaluation and treatment plan that identifies and addresses signs of depression and interventions that address depression as a barrier to successful rehabilitation.

3.5 hrs total

## Module 3

**Predicting Success from a comprehensive functional visual evaluation**

The functional vision evaluation forms the basic structure of our therapeutic approach. Rather than using trial and error to select devices, the evaluation indicates specific barriers to occupational performance that are then targeted by therapy.

The functional visual evaluation method differs from the clinical vision evaluation provided by eye care providers. The functional vision evaluation leads you to specific rehabilitation interventions such as total required magnification for a specific reading or non-reading task, whether test to speech is indicated, electronic versus optical magnifiers, setup for consumer electronics, or optimal lighting.

Because vision evaluation is so important for successful treatment, sections 8-A and 8-B cumulatively include a lecture presentation that is rich with video, animations and examples that supplement the Chapter. We recommend that you review the presentation- especially the reading acuity testing and estimation of CPS where the content has been elaborated.

**Week 2  
(0.45  
CEU, 6.5  
hrs)**

**Predicting Magnification, contrast, and lighting requirements**

- 1) Chapter 5 presentation & test (mostly review, 1 hr).
- 2) Chapter 8A & test (3 hrs)
- 3) Assignment: evaluate assigned patient from virtual clinic (1hr)
- 4) Interactive presentation: Case studies (1.5 hrs)

**Instructional Objectives**

The student will...

- Describe and interpret an evaluation of occupational performance, the criteria for an ideal formal test of occupational performance and informal strategies used to elicit functional problems associated with these visual impairments.
- Describe the correct test administration procedure for recommended tests of near visual acuity, contrast sensitivity and a lighting evaluation.
- Record the results, and predict the visual requirements to perform a visual task, given a video recording of test performance or a written record of test results using common notation and abbreviations.
- In a treatment plan, indicate the involvement of an eye-care provider

<b>Week 3</b> <b>(0.55</b> <b>CEU, 5.5</b> <b>hrs)</b>	<h3>Predicting effective compensatory scanning strategies</h3> <ol style="list-style-type: none"> <li>1) Online asynchronous presentation</li> <li>2) Chapter 8B &amp; test (3 hrs)</li> <li>3) Assignment: evaluate assigned patient from virtual clinic (1hr)</li> <li>4) Interactive presentation: Case studies (1.5 hrs)</li> </ol> <p><b>Instructional Objectives</b></p> <p>The student will...</p> <ul style="list-style-type: none"> <li>• In a functional vision evaluation describe and interpret with examples of performance effects the correct test administration procedure for recommended tests of central field loss, peripheral field loss, and oculomotor limitations</li> <li>• Record the results, and predict expected visual function and performance problems, given a video recording of test performance or a written record of test results using common notation and abbreviations.</li> <li>• Interpret a functional visual evaluation from video tape that indicates visual barriers and interventions that would be predicted to circumvent these barriers.</li> </ul>
<h2>Module 4</h2> <p><b>Overview of Goal writing and treatment planning: seven types of treatment by low vision therapists</b></p>	
<b>Week 4 (0.1 CEU,1 hr)</b>	<ol style="list-style-type: none"> <li>1) Chapter 9 (p144 Table 9-1) ,p 147-152</li> <li>2) In webinar assignment for week 4: Write 2 goals for assigned virtual client.</li> <li>3) In webinar assignment for Week 4 develop a treatment plan for mobility goals that includes at least 4 of the 7 types of treatment for an assigned virtual client</li> </ol>

	<p><b>Instructional Objectives</b></p> <p>The student will...</p> <ul style="list-style-type: none"> <li>• Describe seven areas of treatment in low vision rehabilitation and incorporate them into a treatment plan. .</li> <li>• Write observable and measurable performance goals.</li> </ul>
<p><b>Module 5</b></p> <p><b>Environmental Modifications, and achievement of independent living skills and orientation and mobility</b></p>	
<p><b>Week 4</b> <b>(0.3 CEU, 3 hr)</b></p>	<p><b>Environmental Modification and mobility</b></p> <ol style="list-style-type: none"> <li>1) Complete test for Chapter 12</li> <li>2) Complete test for Chapter 19. (2 hrs)</li> <li>3) In webinar assignment for Week 4 develop a treatment plan for mobility goals that includes at least 4 of the 7 types of treatment for an assigned virtual client</li> <li>4) Interactive Webinar: reviewing the webinar assignment.</li> </ol> <p><b>Instructional Objectives</b></p> <ul style="list-style-type: none"> <li>• Select the most effective environmental modification including non-visual modifications to avoid trips and falls in the home environment.</li> <li>• Instruct someone on human guide technique.</li> <li>• Select the type, and characteristics and position of a light that will minimize fall risk in the home</li> <li>• Identify what goals will require the involvements of a certified orientation and mobility specialist.</li> </ul>

**Week 5**  
**(0.65 CEU, 6.5 hrs)**

**Achievement of independent living skills.**

- Chapter 16 & 17 & tests (4 hrs)
- In Webinar assignment for Week 4 develop a treatment plan that includes at least 4 of the 7 types of treatment for ILS goals for your assigned virtual client (1 hr)
- **Interactive presentation: Discussion of assigned cases (1.5 hrs)**

**Instructional Objectives**

Given a clinical scenario including the results of a functional evaluation (Chapter 8) the student will ....

- Design the most effective environmental modification including non-visual modifications.
- Given the results of an evaluation describe the type, and characteristics and position of a light that will optimize performance of a visual task.
- Design of a specific room that will optimize visual and non-visual performance of an activity.
- From an analysis of evaluation results, describe technique that will enable achievement of effective personal hygiene and grooming and differentiate what tasks will require referral to an ILS specialist.
- From an analysis of evaluation results technique or product to facilitate independence in identifying and matching clothing what tasks will require referral to an ILS specialist.
- From an analysis of evaluation results describe a technique that will enable a client to return to eating neatly and without spillage what tasks will require referral to an ILS specialist.
- Identify reasons for referral to a Certified Vision Rehabilitation Therapist.
- From an analysis of evaluation results identify techniques or products to facilitate independence and accuracy in telephone use. what tasks will require referral to an ILS specialist
- From an analysis of evaluation results select a method or adaptive product that will lead to achievement of safety and independence in meal preparation. what tasks will require referral to an ILS specialist

	<ul style="list-style-type: none"> <li>From an analysis of evaluation results describe an effective adaptive cleaning strategy what tasks will require referral to an ILS specialist.</li> </ul>
--	--

**Module 6**

**Reading, Writing and phone use with a Windows Computer, Iphone and Ipad.**

*An Iphone or ipad is required for the next 2 weeks*

<p><b>Week 6 (4.5 hrs)</b></p>	<p><b>Instructional Objectives</b></p> <p>Given a clinical scenario including a goal task, the results of a functional evaluation (Chapter 8) and/or the visual requirements for a task, the student will ....</p> <ul style="list-style-type: none"> <li>From an analysis of evaluation results select a combination of optical device, smartphone and tablet computer that will enable a reading a writing goals including messaging, email, telephone use, reminders, calendar, and a news source.</li> <li>From an analysis of evaluation results simplify a device to enable use by someone with no prior device skills with distance supervision.</li> <li>From an analysis of evaluation results set up a device with the magnification and contrast and text to speech required for someone with any level of vision loss to read and write with distance supervision.</li> <li>From an analysis of evaluation results independently identify and correct a problem a client might have using an electronic device .</li> </ul> <ol style="list-style-type: none"> <li><b>Chapter 14 &amp; test (2 hrs)</b></li> <li><b>Asynchronous presentation setting up and using an Ipad and Iphone as an assistive device. (1.5 hrs)</b></li> <li><b>Assignment- (1 hr)</b></li> <li><b>Interactive Webinar (1.5 hrs)- setting up the devices, including external lighting and required optical device or near addition.</b></li> </ol>
------------------------------------	--

<p><b>Week 7</b> (0.2 CEU, 2 hr)</p>	<p>1. Interactive Webinar (1.5 hrs)- Use of a iphone or Ipad as an assistive device. .</p>
<p><b>Module 7</b></p> <p>Managing Peripheral Field Loss and Neglect from brain injury and stroke</p>	
<p><b>Week 8</b> (0.1 CEU, 1 hr)</p>	<ol style="list-style-type: none"> <li>1. Asynchronous Presentation 1 hr</li> <li>2. Chapter 11 <i>Correction: Figure 11-7 illustrates an inferior homonymous quadrantanopia. &amp; test</i> (2 hrs)</li> <li>3. Assignments- cases Ms Evonne, Adrienne and Ms. Mary. (1hr)</li> <li>4. Interactive Webinar (1.5 hrs)- Review of case (1.5 hr).</li> </ol> <p><b>Instructional Objectives</b></p> <p>The student will</p> <ul style="list-style-type: none"> <li>• Demonstrate .and interpret with examples of effects on performance the administration of confrontation field testing, tangent screen testing using a laser light and wall, and expected reading errors and mobility problems with right, left homonymous hemianopia and an altitudinal defect.</li> <li>• From an analysis of evaluation results differentiate visual field loss from spatial neglect.</li> </ul>

	<ul style="list-style-type: none"> <li>• Demonstrate common functional problems and compensatory scanning techniques and Fresnel prism placement used with just a field loss.</li> <li>• Describe non-visual impairments and common psychosocial problems associated with spatial neglect.</li> <li>• Describe interventions used to ameliorate the symptoms of and compensate for spatial neglect.</li> </ul>
--	--

<h2 style="margin: 0;">Module 8</h2> <h3 style="margin: 0;">Managing Medication and Diabetes</h3>
---

<p><b>Week 9 (4 hrs)</b></p>	<p>1) Chapter 20 &amp; test (2 hrs)                  2) Lecture presentation: (2hrs)</p> <p><b>Instructional Objectives</b></p> <p>The student will ...</p> <ul style="list-style-type: none"> <li>• Identify a reason for referral to a Certified Diabetes Educator who is a nurse or dietitian.</li> <li>• Identify a reason for referral to a Dietitian with expertise in diabetes.</li> <li>• Describe the AADE7 Self-Care behaviors and sample behaviors associated with each.</li> <li>• Describe hypoglycemia, symptoms associated with it, and products that can be used to treat it.</li> <li>• Ask pertinent questions in a diabetes self-management assessment.</li> <li>• Select a technique or product that can enhance an individuals’ return to diabetes self-management.</li> <li>• From an analysis of evaluation results incorporate the use of optical and electronic devices in adaptive diabetes self-management program.</li> <li>• From an analysis of evaluation results develop an instructional program that a client should should implement in their diabetes self-management program.</li> </ul>
------------------------------	---

**ADA Compliance**

©Stephen G. Whittaker 2021

The slides and video are currently fully described by the narrative. The examination should be fully accessible by screen readers.

---

\* Disclosure of potential conflict of interest: Stephen Whittaker may receive royalties from one assessment instrument (The Pepper Visual Skills for Reading Test). With all instruments that produce royalties to Dr. Whittaker, alternative available assessment techniques and instruments have been presented.