



Texas School for the Blind and Visually Impaired

Outreach Programs

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Magnifier Lessons

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Magnifier Lesson 1: Orientation to a Handheld Magnifier

Procedure

1. Have on display a variety of objects to investigate with a magnifier. Examples include feathers, leaves, cloth, seeds, money, coral, paper wasp nest, and sticker burrs. (a lamp may be needed if lighting is insufficient)
2. Allow the student to investigate the materials without the magnifier. Introduce a handheld magnifier in order to see the finer details of the objects on display. Demonstrate how to hold the magnifier to get the clearest image. Introduce the term “focal distance”, or the distance between the magnifier lens and the object being viewed.
3. Optional activities to stretch this activity:
 - Draw pictures of what you see
 - Look up the object in a field guide
 - Go for a walk to investigate objects found outside
4. Ask the student if there are things up close he would like to be able to see better. Make a list.

Additional Activities:

Magnifier Lesson 2: Orientation to a Stand Magnifier

Procedure

1. Explain the difference between a handheld and stand magnifier. (refer to p. 170 in Looking to Learn) Be sure to mention the types of materials and situations in which you would use each kind of magnifier.
2. Play a game using the stand magnifier to read fine print. Examples of games include Monopoly (read the spaces on the board, the real estate cards, and the Chance/Community Chest cards); Trivial Pursuits; any board game that includes small cards to read.
3. Look at photographs you and your student bring from home of family, pets, etc.
4. Compare finger prints.

Additional Activities:

Magnifier Lesson 3: Positioning, Stabilizing Material, Stabilizing the Hand, Adjusting Head-to-Lens Distance

Procedure

1. These skills are the “ergonomics” of using a magnifier. They will enable the student to read for extended periods of time with less back, neck, and arm strain. Use a 3-ring binder tilted toward the student on which to set (flat) material. Both feet should be flat on the floor, the head to lens distance should be comfortably maintained, and the hand holding the magnifier should be stabilized. There are slightly different techniques for the two different styles of magnifier (refer to pages 174-176 in Looking to Learn)
2. Place materials to be viewed on the binder to practice with the magnifier. Be sure to use materials which may be of interest to your student. Examples include CD music case, lyrics of a song, jokes, magazines, Nintendo magazine, photo album.
3. Practice moving smoothly across the material being viewed, keeping a comfortable posture and supporting the hand/arm holding the magnifier. Ask the student to describe what he sees.

Additional Activities:

Magnifier Lesson 4: Reading on a Flat Surface

Reading a Variety of Formats

Procedure

1. Examples of materials for this lesson include books, letters, workbooks, worksheets, newspapers, and magazines. For this lesson, however, be sure the materials are spaced evenly (not single spaced, as this is too difficult just yet), and arranged in a systematic order on the page.
2. Encourage correct positioning of the body and materials (refer to the previous lesson).
3. Demonstrate the correct scanning technique: Start in the upper left corner. Move across the top, then backtrack and move down. Repeat to the bottom right corner. Ask your student to tell you the format that was used on this page (columns, boxes, continuous text)
4. Ask the student to read or describe the content of the page.
5. Follow this lesson with examples of a variety of formats. (refer to page 177-178 in Looking to Learn for ideas on more formats) Be sure to include a sample of the student's own handwriting.

Additional Activities:

Magnifier Lesson 5: Tracking at Reading Speed

Procedure

1. Before starting this lesson, the student must be experienced at stabilizing materials and using positioning that enables him to read for longer periods of time. This lesson also assumes that the student has some fluency in reading.
2. Two modifications which may help the student stay on the line include a ruler (to hold under the line being read when using a handheld magnifier) or placing a Post-It note along the middle of the bottom of the stand magnifier.
3. Start by asking the student to smoothly track across each line of print, but don't read just yet. Use materials that are double spaced.
4. The object is to track while staying on the line with the magnifier. Reinforce smooth left to right, up to down movements
5. Ask the student to read out loud. Ask one or two comprehension questions when he is finished.
6. As you continue with this type of lesson, introduce a stop watch for the student to time himself. Keep a chart noting the date, # of words read in 5 minutes, the # of miscues (mistakes), and the percentage of comprehension questions he answered correctly. Keep the time frame to 5 minutes until it is relatively easy for your student. Gradually you will increase this time to up to 20 minutes.
7. To perfect this skill, the student will need to practice at least 3 times a week for 5-15 minutes each time. This will mean either assigning work to be done at home, or to be done in another setting at school.

Additional Activities: (or ideas for reading materials)

Magnifier Lesson 6: Using the Magnifier for Classroom Assignments

Procedure

In order to use the magnifier successfully in class, your student will have to be proficient at positioning, tracking, and adjusting to different formats. Start by selecting one class or subject area (or ask your student to select one) in which to integrate reading with the magnifier. Discuss your objective with the classroom teacher, including a reinforcement system to be used. Ultimately, the classroom teacher will have to encourage and reinforce usage of the magnifier in your absence.

Observe the class on a typical day to see the type of (near) reading required of your student (e.g. text book, worksheets, taking notes). Select one reading task to reinforce (the shortest or easiest).

1. Discuss your objective with the student: To use the magnifier to read in at least one class. Review the reinforcement system you and his classroom teacher have decided upon.
2. Ask him to begin today (or tomorrow) in one class (or subject area). Remind him that you will be observing during this class time next week.
3. On the following week, step into the class to observe how the magnifier is being used, but avoid using this time to correct your student if this would be intrusive.
4. At your next lesson, discuss your observations. Give tips, if necessary, on techniques which may increase speed or stamina.
5. Ask your student to select a second class in which to use the magnifier. Continue to add classes.

Additional Activities:

Magnifier Lesson 7: Using the Magnifier for Life Skills

Procedure

Life skills reading with a magnifier includes the day to day reading that we all do outside of school. This includes medicine bottles, menus, bills, inserts on CD's, cans, maps, charts, recipes, oven dials....the list is endless.

1. Give your student a sheet of paper and ask him to list all the things in his house he sees people reading. Or, he can ask each person in his house what they have read today.
2. When he brings this list back to school, review it with him. Ask him to mark the things he can read well without magnification. Ask him if there are any things not on the list that he would like to be able to see better (things using near vision).
3. Collect as many of these items as you can for the next lesson.
4. On the next lesson, practice reading these items. They may require different types of magnifiers, so be prepared by having both stand and handheld magnifiers available. As he is able to access each item, put a check next to it on the list. Add the names of items he discovers he can read more easily with the magnifier.

Additional Activities:

Goals and Objectives For Magnifiers

The following goals and objectives are purposely not written in measurable terms in order to enable the teacher of students who are visually impaired to customize them to individual students.

GOAL: To demonstrate skills for magnifier maintenance

OBJECTIVES: The student will be able to:

1. Hold the magnifier properly
2. Communicate the purpose of the magnifier
3. Clean the magnifier appropriately
4. Assume responsibility for the magnifier
5. Store the magnifier in a convenient location for quick retrieval
6. Initiate the use of the magnifier

GOAL: To demonstrate skills for magnifier use

OBJECTIVES: The student will be able to...

1. Position self for optimal viewing
2. Stabilize the reading material/object
3. Stabilize the hand using the magnifier
4. Adjust the head-to-lens distance
5. Coordinate the hand, head, and eye movements specific to the type of magnifier
6. Use the magnifier to read on a flat surfaces
7. Read a variety of print formats
8. Track at a speed which allows for reading commensurate with reading level
9. Develop stamina for the duration of an age- or grade-appropriate assignment
10. Select the appropriate magnifier for the task
11. Use the magnifier for nonprint activities