Magnifiers: An Overview

Magnifying devices help people with low vision engage more easily in activities such as reading standard print, enjoying a hobby, or viewing a presentation by increasing the size of text and objects. Individuals with low vision can read documents, books, magazines/newspaper, prescriptions, view images, etc., comfortably. These devices not only allow for adjusting the magnification but may also include color contrast, illumination, reading masks, and motion (such as panning), so look for the features to match your student's needs.

The best type of magnifier for you will depend on your level of vision, the size of the task that you need the magnifier for, the kind of task you're doing, how long you'll need to use the magnifier, and whether you're looking at something near or at a distance. There are many types of magnification devices, such as handheld, illuminating magnifiers, electronic magnifying systems, portable digital magnifiers, and wearable devices, to mention a few.

We are going to review the following types:

- handheld illuminated magnifiers
- electronic magnifying systems
- portable digital magnifying systems
- wearable devices

Remember, a magnifier offering a larger field of view is better for scanning activities like reading, while the smaller field associated with a higher magnification would be more appropriate for fine details, such as medicine bottle information or ingredients on a can.

Other Considerations

- 1. The viewing distance from the object
- 2. Length of time of the activity
- 3. Whether both hands are required
- 4. Age of student, regarding ability to hold and navigate the device to access the print/object/image
- 5. Is speech a benefit?

- 6. Portability
- 7. Authoring requirement (writing)

Types of Magnifying Devices: Sample Listing

Bar Magnifiers: Provide magnification for one or two lines of text at a time; lies flat on the reading material and is moved along the page as reading progresses.

Binocular Magnifiers: Worn around the head, either alone or over prescription or safety glasses for close-up precision use.

Desktop Video Magnifiers: Typically larger, non-portable devices placed on a table/desk used to read documents or books with a monitor/camera. A variety of other featured elements are included, so pay attention to the options.

Handheld Magnifiers: Useful for spot tasks such as reading a label on a medicine bottle, checking a price tag, or consulting a map. Illuminated and non-illuminated models in round or rectangular shapes are available.

Portable Video Magnifiers: Handheld camera and screen devices that, in addition to magnifying an image, can also change contrasts, freeze images, and illuminate objects. Sizes and features vary.

Screen Magnification Software: Displays the information on a computer or television screen in a variety of magnification levels with other feature options, including speech.

Smart devices also come with magnification and other low vision options, which may change with the operating system updates/upgrade routinely, e.g., iOS devices.

Resources

Paths to Literacy: Magnification (pathstoliteracy.org/magnification)

<u>AFB: Low Vision Optical Devices</u> (afb.org/node/16207/low-vision-opticaldevices)

APH: Fun Activities for Teaching Magnifier Usage

(familyconnect.org/education/literacy/fun-activities-for-teaching-magnifier-use)

NLS: Magnifying Devices: A Resource Guide

(loc.gov/nls/resources/blindness-and-vision-impairment/devicesaids/magnifying-devices)