



Support for Eye Gaze AT Devices — SPIRE

This guide is designed to bridge SPIRE pure form instruction with instruction that relies on Augmentative and Alternative Communication (AAC), supporting both print AAC and manipulative integration as well as the use of AAC technology devices. This document focuses primarily on instructing students that require the use of eye gaze devices and generally use eye gaze as their primary method of communication.

Before instruction begins, teachers may want to consider methods for [Optimizing Availability for Learning](#). This includes important considerations to reflect upon prior to and during instruction. The National Center on Deaf-Blindness has prepared a resource document that can support a variety of students with varying communication needs.

An important evidence-based strategy that students can use throughout the lessons is the **Nonverbal Reading Approach (NRA)**. In this approach, students are taught to decode words through a sequence of *visual and internal speech* steps rather than oral reading. A teacher might introduce a word by saying it (“man”), then slowly segmenting and stretching the sounds (“mmm–aa–nn”) while pointing to each letter and then showing the whole word again. The student is instructed to **say the sounds “in their head”** and blend them mentally, rather than out loud. Finally, the student demonstrates recognition of the word by selecting the correct word (or a picture of it) from choices, or by typing it on an AAC keyboard, instead of speaking it.

Here are some additional ideas to consider within each of SPIRE’s 10 steps.

SPIRE Step	Support Suggestions
Step 1: Phonogram Cards	<ul style="list-style-type: none">• Shuffle all the cards. Put a set of 5 cards, spaced out, on the board. Say a sound and have the students focus their eyes on the letter that would make that sound. Do this out of order so students are not just moving their eyes left to right without truly identifying the letters. Repeat this process again, this time asking for them to look at the letter that has the letter name (blank). Blank being one of the 5 letters. After you complete this set of 5, go to the next set of 5.• Not all cards have to be drilled each time.• Consider drilling 10-20 cards at the start of EVERY lesson, not just ones that begin with step 1. The teacher can change out what cards are drilled each time as the deck

	<p>gets larger, making sure that all cards get drilled throughout the week.</p>
<p>Step 2: Phonological Awareness</p>	<ul style="list-style-type: none"> • Place thumbs up/thumbs down visuals, spread apart, at the front of the class. Say words, ask students to say those words in their head, and then ask students to place their gaze on the thumbs up if the target sound is in the word • Use Elkonin boxes for phoneme segmentation. Draw the boxes larger and have up to 5 boxes drawn. Have students look at new box each as you say each sound OR have the say the says internally as they look at each box. Ensure the student only looked at the correct number of boxes (this will also help you determine if they know all the sounds and the correct number of sounds).
<p>Step 3: Word Building</p>	<ul style="list-style-type: none"> • Place just the letters that are needed for the list of words in the activity on the board spread out (you can use the large phonogram cards). Encourage students to sound out in their head. Ask the students to think of the first sound in the word and then look at the letter or team that spells that sound. Pull down the phonogram card to a line on the board as they identify each sound(s)/letter(s). Have students look at each phonogram as you say each sound and then blend it.
<p>Step 4: Decoding and Sentence Reading</p>	<ul style="list-style-type: none"> • Workbooks can be uploaded into eReader and eye gaze software using what is provided on Nimac • Place words one at a time of the board spelled large with the letters separate. Ask students to direct their gaze to the vowel. Underline the vowel and say the sound. Repeat for any other markings. Have students look at each letter or team as you say each sound, encourage internal reading. Blend the sounds as the students do so internally (in their head). Repeat for each word in a row. • After a whole row of words has been taught, display that row of words from the workbook on a sentence strip with the words spaced out. You can spread them across the board if desired. Call out a word and have students direct their gaze to the target word amongst the options. • Use devices and visual to support vocabulary training of students. • Teachers can have students read a word independently and then give picture options and have the students use

	<p>eye gaze to look at the picture that accurately depicts the word they just read.</p>
Step 5: Prereading	<ul style="list-style-type: none"> • Write the target word large on the board. Just have students use their eye gaze to look at the letter that spells a certain sound (the first half of the step).
Step 6: Reading	<ul style="list-style-type: none"> • Workbooks can be uploaded into eReader and eye gaze software using what is provided on Nimac • Call out words from the word find sheet and have students find with their gaze. • Teachers can have pictures that depict the sentences and then have students look at the picture that depicts what the sentence said. • Once the passages are uploaded to the eye gaze software via Nimac, have students read through the sections of the passage. The teacher should then stop the student and ask a yes or no or simple choice question and have the options available for eye gaze. Have students use their gaze to answer the questions. Continue this for each section until the passages are complete. • For graphic organizers, break down components into options. For something like main idea, have 2 or 3 options for what the main idea was written and have students gaze at the option that accurately summarizes the main idea. For sequencing, have 3 to 4 events from the passage. Have students keep their gaze on the item that happened first. Repeat this for what happened, second, third, etc.
Step 7: Sound Dictation	<ul style="list-style-type: none"> • Use eye gaze with a selection of letters to determine which letter or letter teams spell the sound that has been dictated.
Step 8: Prespelling	<ul style="list-style-type: none"> • Use Elkonin boxes and have students look at each box for each sound
Step 9: Word Dictation	<ul style="list-style-type: none"> • Students can spell words using eye gaze for each sound in the word.
Step 10: Sentence Dictation	<ul style="list-style-type: none"> • The words of a sentence can be scrambled up on the board with a few extra words. Have students use eye gaze to find each word, in order, that would spell the sentence. As a challenge, misspellings of words could be provided.