



3D Bridge from Phonemic Awareness to Reading

Because dyslexics think in 3D, it makes sense to teach them in 3D. “The success or failure of helping a person with a disorder like dyslexia to read, lies not only in how their brain works, but also in how information is presented” (Leonard 2003).

“Maximize your strengths, minimize your weakness,” advises Dr. Sally Shaywitz (2003). By teaching the process of reading, using three-dimensional objects, in a mode in which a dyslexic already succeeds, he is given a hook in which to attach sounds onto symbols. The visual-spatial strength is used to teach a weakness in decoding.

“Dyslexia is associated with a particular type of visual-spatial talent—enhanced ability to process visual-spatial information globally (holistically) rather than locally (part by part)” (Winner, von Károlyia 2003). By using phonemic objects we can build on the dyslexics’ visual-spatial ability and the ability to see the big picture first.

Phonological awareness is a critical step in reading. Holding a “sound” in the palm of a hand becomes a natural bridge in which to connect sounds to the printed symbol they represent. Using objects takes the fear out of learning and takes advantage of the natural desire for touch with which we are born. The child is able to explore a sound in 3D before moving to flat print.



Albert Einstein said, "If I can't picture it, I can't remember it." This way of teaching allows the student not only to see, but also to *feel* how sounds build words before they ever see a printed symbol. "Students who are dyslexic learn first by understanding the big picture" (Shaywitz 2003). Through objects the students are shown the big picture first, then the sounds or rules are taught, but the groundwork for the concept has already been laid.

The objects are concrete representations of sounds. The student not only sees the letter and hears the sound, but also holds and feels the sound, adding more senses to help him remember. By using the visual-spatial ability dyslexics have, concrete objects are used to teach abstract ideas. When learning the letter *f*, the student is given a plastic fish to hold, for example. This way he gets to actually feel the */f/*. Because his strength is whole picture thinking, he is given the chance to understand how */f/* is a part of something bigger. He gets three-dimensional practice in segmenting before he has to deal with frustrating two-dimensional letters.

By positioning the objects into various initial, medial, and final positions the student learns blending, sequencing, and discriminating sounds. Letters are then placed in front of each object. Through multisensory techniques and repetition, the sound of the letter is imprinted on neural pathways. The trainers will show several of these right-brained strategies to teach left-brained skills.



Objects are also used to teach rules and patterns of the English language. The student then transfers that knowledge from objects to printed letters while

practicing spelling words with that pattern. He has learned the rule using a way of thinking in which he already finds comfortable and successful.

Information is absorbed best by using multiple senses. Participants will not only see and hear how to teach in 3D, they will get hands-on experience.

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Phonemic Object Suggestions

the alphabet

- a - alligator, astronaut, ant, ax, apple
 - a - acorn, ape, angel, apron
 - e - egg, elephant, envelope
 - e - Easter egg, eraser, earrings, eagle
 - i - indian, igloo, insect, iguana
 - i - ivy, ice cream cone, icicle
 - o - octopus, ostrich
 - o - oatmeal, oval, opener
 - u - umbrella, underwear
 - u - unicorn, unifix cube
 - b - beaver, bird, bug, battery, boot, bell, bat, basket, bottle, balloon
 - c - cup, candle, cotton, candy, cow, card, car
 - d - dog, duck, dollar, dice, deer, dinosaur
 - f - fan, fire cracker, film, fish, fork, fox
 - g - gum, girl, gorilla, gauze, gold, goose
 - h - horse, hammer, doll hanger, heart, helmet, hat, hand, hen, hippo
 - j - juice box, jello box, jacket, jewels, jacks, jack o' lantern
 - k - keys, Kleenex, king, ketchup packet, kangaroo, kitten, kazoo
 - l - lion, leopard, ladybug, Lego, lock, lizard, leaf, lotion
 - m - Mickey Mouse, marble, mustard packet, moose, monkey, money, mitten, marker
 - n - nail, needle, nose, noodles, napkin, 9, nut, necklace
 - p - pumpkin, pear, penguin, penny, pacifier, paint, pig, polar bear
 - qu - quilt, queen, quarter, question mark
 - r - ring, raisin, rat, raccoon, rubber band, rock, rake, rose, rocket
 - s - sock, sucker, soccer ball, sandpaper, 6, 7, scissors, salt packet
 - t - tiger, turtle, tent, top, totem pole, tack, tire, tooth
 - v - valentine, vest, vase, vine, Velcro
 - w - walrus, world, watch, worm, wagon, wire
 - x - ending sounds - box, fox, six
 - y - yo yo, yogurt, yak, yellow crayon, yarn
 - z - zebra, zero, zipper, zigzag (rickrack)
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Tasting the Alphabet

- a - apple slice
- b - banana
- c - candy
- d - donut
- e - egg
- f - fudge
- g - gummy bears
- h - hot dog
- i - ice cream
- j - juice
- k - kiwi
- l - lemon
- m - muffin
- n - noodles/nut
- o - black olive
- p - popcorn
- q - Quaker® snack bar
- r - raisins
- s - sunflower seeds
- t - toast
- u - bubble gum
- v - Vienna® sausage
- w - watermelon
- x - Chex Mix®
- y - yogurt
- z - zucchini or Pez®