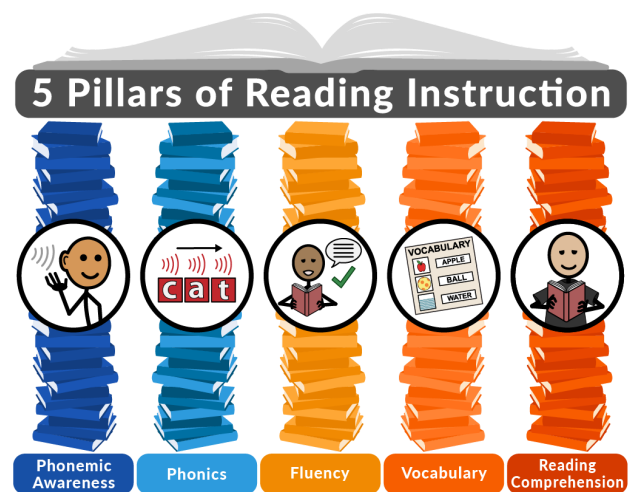




Differentiation Guide for Reading Instruction

The National Reading Panel (NRP) issued a report in 2000 which identified five key pillars of reading instruction: phonemic awareness, phonics, fluency, vocabulary and reading comprehension. Historically, students who have exhibited barriers to reading have been excluded from systematic and explicit instruction in these foundational reading skills. This may include students with communication, physical, sensory or processing considerations. However, this does not need to be the case. Through accommodations and modifications to instruction, these students can access the five pillars of reading instruction. This document provides research and evidenced-based strategies to use when working with students who may have unique considerations when accessing reading instruction.



Although the strategies in this guide are intended for reading instruction, many of them can easily be translated across subjects and throughout the school day to ensure students are being provided with the same access and experiences as their peers.

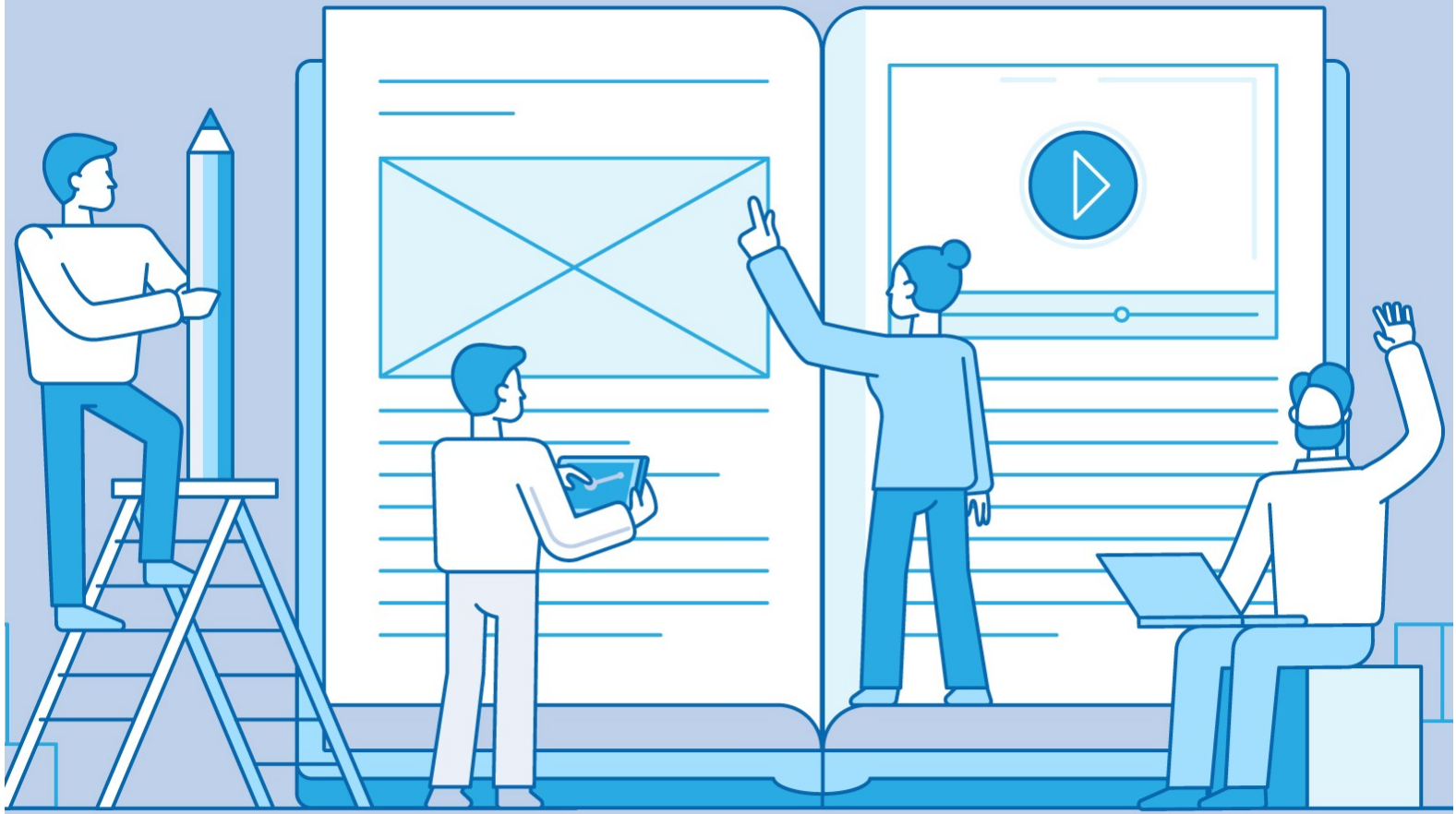


Table of Contents

Page	Objective
1	Introduction
3	Working With Students Who Have Communication Considerations
5	Working With Students Who Have Physical Considerations
7	Working With Students Who Have Visual or Auditory Considerations
8	Working With Students Who Have Processing, Memory and Focus Considerations
9	Resources
15	References

Working With Students Who Have Physical Considerations

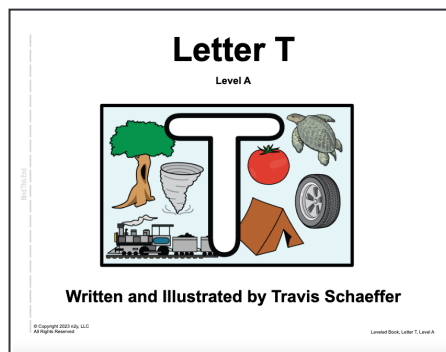
Consider Seating and Positioning

Reading and writing tasks require both gross and fine motor skills. Some students may need additional support in this area. Consider the student's posture and seating position during tasks to ensure that they are comfortable and well supported. This may mean providing a student access to an appropriately-sized desk, chair or specialized equipment that allows their feet to be flat on the floor and their back well supported. Ensure students have a clear line of vision to texts that they are reading and access to appropriate materials when writing.

Adapting Books for Physical Access

Students who have difficulty physically holding a book or turning the pages may need access to adapted books during reading instruction.

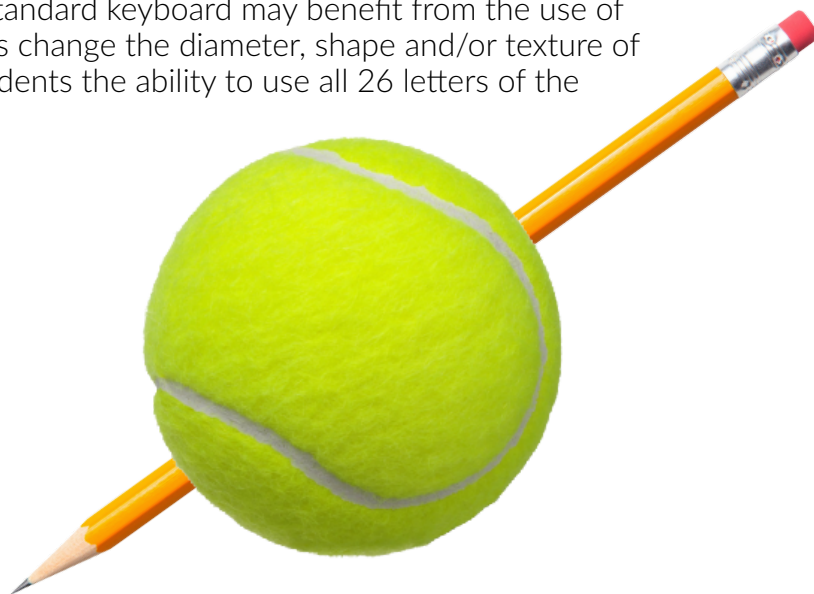
- Mount books on cardboard or place hook and loop fasteners (e.g., VELCRO®) on front and back covers to attach the book to carpet.
- Make pages thicker by attaching to cardboard.
- Attach page turners to each page (tongue depressors, craft sticks).
- Use page fluffers to keep pages separate and easier to turn (foam squares, pom-poms, paperclips, etc).
- Rebind books so they stay open more easily.
- Laminate pages or place in protective sheets.
- Use digital versions of a book.
- Provide switch access to digitally turn pages.
- Provide hand-over-hand support.



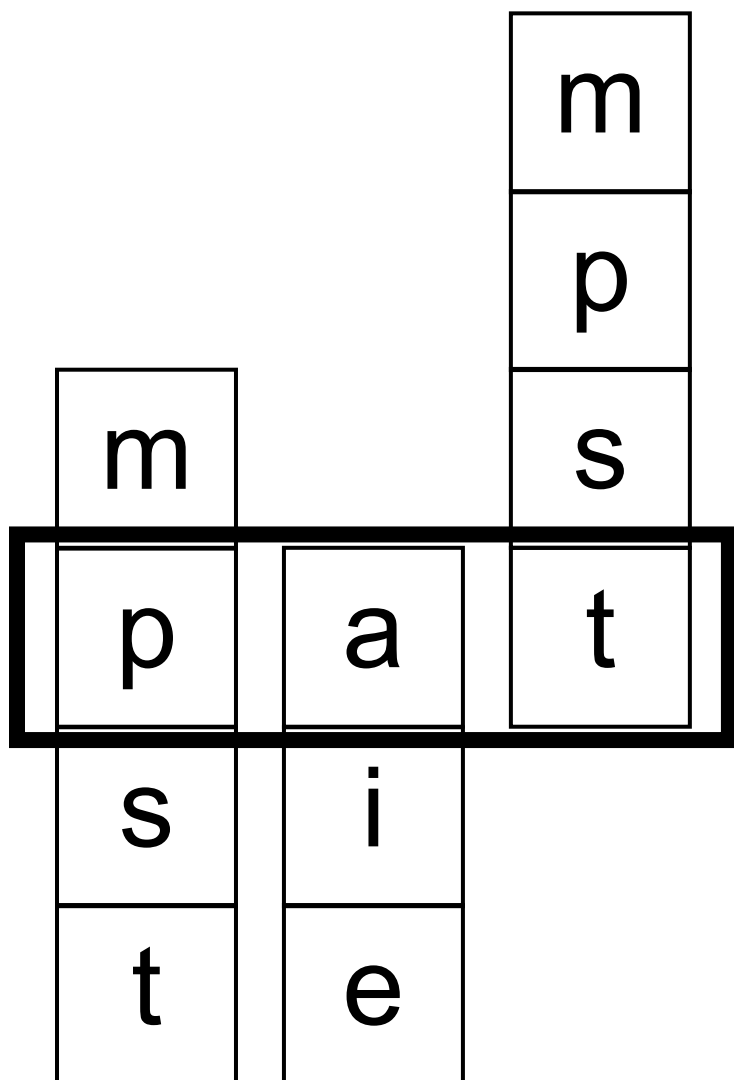
Adaptive or Alternative Pencils

There is a link between physically writing letters and learning sounds. Students who are unable to hold a traditional pencil or physically manipulate a standard keyboard may benefit from the use of adaptive or alternative pencils. Adaptive pencils change the diameter, shape and/or texture of writing utensils. Alternative pencils provide students the ability to use all 26 letters of the alphabet when writing.

- Pencil grips, holders or weights.
- DIY Tennis Ball Pencil grip.
- On-screen or virtual keyboard.
- Drawing or painting app.
- Alphabet board or flip chart.
- Eye Gaze board or frame.
- Alphabet stamps.
- Magnetic letters.
- Letter tiles.
- Slant board.
- Dictation or other audio recording options.



Movable Alphabets



Students can be provided with large moveable alphabets that meet their needs. By providing larger, thicker or heavier letter tiles, students with physical considerations may be able to manipulate them and participate in identifying sounds and making words more easily. This could include large wooden or plastic letters or sliding letter frames that are easier for the student to maneuver. Letters can also be written on large index cards or attached to heavy cardboard for students to manipulate.

References

- Ahlgrim-Delzell, L., Browder, D., & Wood, L. (2014). Effects of systematic instruction and an augmentative communication device on phonics skills acquisition for students with moderate intellectual disability who are nonverbal. *Education and Training in Autism and Developmental Disabilities*, 49(4), 517–532.
- Browder, D. M., Wakeman, S., Spooner, F., Ahlgrim- Delzell, L., & Algozzine, B. (2006). Research on reading for students with significant cognitive disabilities. *Exceptional Children*, 72, 392-408.
- Fallon, K. A., Light, J., McNaughton, D., Drager, K., & Hammer, C. (2004). The effects of direct instruction on the single-word reading skills of children who require augmentative and alternative communication. *Journal of Speech, Language, and Hearing Research*, 47(6), 1424–1439. [https://doi.org/10.1044/1092-4388\(2004/106\)](https://doi.org/10.1044/1092-4388(2004/106))
- Heller KW, & Coleman-Martin MB. (2007). Strategies for promoting literacy for students who have physical disabilities. *Communication Disorders Quarterly*, 28(2), 69–72.
- Johnston, S. S., O’Keeffe, B. V., & Stokes, K. (2018). Early literacy support for students with physical disabilities and complex communication needs. *TEACHING Exceptional Children*, 51(2), 91–99. <http://dx.doi.org/10.1177/0040059918802808>
- Kao, M. A., & Mzimela, P. J. (2019). “They are visually impaired, not blind ... teach them!”: Grade R in-service teachers’ knowledge of teaching pre-reading skills to visually impaired learners. *South African Journal of Childhood Education*, 9(1).
- Light, J., McNaughton, D., Weyer, M., & Karg, L. (2008). Evidence-based literacy instruction for individuals who require augmentative and alternative communication: a case study of a student with multiple disabilities. *Seminars in Speech and Language*, 29(2), 120–132. <https://doi.org/10.1055/s-2008-1079126>
- Light, J., & McNaughton, D. (November, 2010). Evidence-based literacy intervention for individuals with autism. Presentation at the American Speech and Hearing Association, Philadelphia, PA. http://aac-rerc.psu.edu/_userfiles/file/Light_ASHA_2010_Literacy%20&%20autism%20handouts.pdf
- National Reading Panel (U.S.). (2000). *Report of the National Reading Panel : teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Child Health and Human Development.
- Paul, P. V. (2020). *The Education of d/Deaf and Hard of Hearing Children: Perspectives on Language and Literacy Development*. MDPI - Multidisciplinary Digital Publishing Institute. <https://doi.org/10.3390/books978-3-03928-125-1>
- Stauter, D. W., Prehn, J., Peters, M., Jeffries, L. M., Sylvester, L., Wang, H., & Dionne, C. (2019). Assistive technology for literacy in students with physical disabilities: A systematic review. *Journal of Special Education Technology*, 34(4), 284–292. <http://dx.doi.org/10.1177/0162643419868259>
- Trezek, B. J., Wang, Y., Woods, D. G., Gampp, T. L., & Paul, P. V. (2007). Using visual phonics to supplement beginning reading instruction for students who are deaf or hard of hearing. *Journal of Deaf Studies & Deaf Education*, 12(3), 373–384. <https://doi.org/10.1093/deafed/enm014>
- Wiley, R. W., & Rapp, B. (2021). The effects of handwriting experience on literacy learning. *Psychological Science* (0956-7976), 32(7), 1086–1103. <https://doi.org/10.1177/0956797621993111>