

Preparing the Learning Environment

NCDB Practice Guide

A learning environment can either enhance or prevent access to information and social interaction for children and youth with deaf-blindness as well as impact their attention and engagement. The process of preparing learning spaces to optimize learning should consider

- How a child will navigate within those spaces
- How and where the child will be positioned
- How materials will be presented
- How others will interact with and support the child

NCDB Practice Guides outline the essential components of instructional practices commonly used with children who are deafblind. For more information on learning environments, go to nationaldb.org.

Rationale

No two children with deaf-blindness are alike. As such, preparing an environment for a child who is deaf-blind must be highly individualized and based on a thorough assessment of the child's unique sensory, cognitive, and physical needs. The information collected will inform how best to arrange the classroom and create organized, uncluttered learning spaces that are stimulating, motivating, and built on the child's strengths and interests.

Essential Components

Each bolded item below is an essential component of preparing the learning environment. The bullets are the skills a teacher or other adult working with a child or youth who is deaf-blind would display if implementing the components correctly. The elements refer to a "child," but the information is applicable to individuals of all ages.

Organized, Predictable Learning Spaces

The teacher or other practitioner

- Designates a permanent workspace to the child, marked by an identifier cue (e.g., sign, object, photo) the child can understand and recognize
- Plans the workspace to maximize the use of the child's useful hearing and vision (e.g., free of clutter, tactile items are within reach and in the child's optimal visual range)

- Positions materials consistently in the child's workspace
- Keeps learning materials well organized and stored in places that the child recognizes and can access as independently as possible
- Dedicates a space to park wheelchairs, adaptive strollers, and other assistive devices so they do not create a safety hazard
- Determines how the child will be provided space and materials to meaningfully engage in group activities and interactions with peers
- Chooses natural environments for learning when appropriate to enhance skill transfer (e.g., bathrooms, kitchen areas)
- Makes adaptations and modifications that help ensure safety (e.g., use of non-slip mats, clearly identified steps)
- Marks entrances to all learning spaces with identifier cues the child can easily recognize and understand

Clear, Safe Pathways

The teacher or other practitioner

- Ensures that pathways within and between learning spaces are free of clutter
- Ensures that pathways within and between learning spaces are identified by landmarks and cues that the child can easily recognize and understand (e.g., different types of flooring, wall colors)
- Establishes consistent routes between learning spaces (e.g., always use the same route to the cafeteria)

Environmental Adaptations and Modifications

The teacher or other practitioner

- Refers to prior assessment results to determine the ideal primary seating location for the child (e.g., close to the teacher, near a window, next to power outlet) based on their available vision, available hearing, and other sensory and assistive technology needs
- Works with other practitioners (e.g., orientation and mobility specialists, therapists) and the family to determine the child's need for amplification, magnification, adaptive positioning, and other assistive devices/supports
- Optimizes lighting to maximize the child's useful vision (although some children are light sensitive and others need increased illumination, nearly all will benefit from reducing glare)
- Determines how background noise, including ambient sounds (e.g., from fans, air-conditioning, open windows, other people talking) can be eliminated or minimized

- Uses color, texture, and contrast to help the child distinguish locations, objects, and other materials (e.g., doorways, door handles, switches)
- Considers space needed for practitioners, such as interveners and interpreters, and the child's assistive equipment/technology

Observation and Documentation

The teacher or other practitioner

- Monitors the child to make sure they feel safe and secure and show interest and active engagement in the learning environment
- Makes appropriate changes to learning environments based on observation of the child's changing needs and abilities
- Documents the child's environmental needs and ensures all staff working with the child are aware of those needs

You'll know the practice is working if . . .

- The child is comfortable, secure, and confident working in and moving within the learning environment and functions as independently as possible
- The child is better able to recognize, reach for, and distinguish objects and materials in the learning environment
- The child can better recognize patterns and make predictions due to the consistent order and structure of the learning environment
- The environment supports the child's learning and does not become an obstacle to it

Learn More

To learn more about preparing the learning environment, see <u>Modifications to the Learning Environment</u> on the NCDB website (https://www.nationaldb.org/info-center/educational-practices/modifications-to-the-learning-environment/).

NCDB Practice Guides are created using a process adapted from the Practice Profile format developed by the National Implementation Research Network (Metz, 2016). Although NCDB Practice Guides do not provide information about how to plan or implement practices, they outline their essential components. This makes them a useful tool for state deaf-blind project personnel and practitioners to identify training and coaching needs related to specific practices for children with deaf-blindness. They also serve as quick reminders of the purpose and key elements of a practice.

References

Bruce, S. M., Bashinski, S. M., Covelli, R. J., Bernstein, V., Zatta, M. C, & Briggs, S. (2018). Positive behavior supports for individuals who are deafblind with CHARGE syndrome. *Journal of Visual Impairment & Blindness (Online)*, 112(5), 1-9.

Clyne, M., Wolfe, J., Blaha, R., & Hertzog, T. (2015). *Environmental accommodations* (slideshow). National Center on Deaf-Blindness. Open Hands, Open Access learning modules.

Downing, J. & Eichinger, J. (2011). Instructional strategies for learners with dual sensory impairments in integrated settings. *Research & Practice for Persons with Severe Disabilities*, 36(3-4), 150–157.

Hodges, L. (2000). Effective teaching and learning. In S. Aitken, M. Buultjens, C. Clark, J. T. Eyre, & L. Pease (Eds.), *Teaching children who are deafblind: Contact communication and learning* (pp. 168-199). David Fulton Publishers.

Joffee, E. (1995). Approaches to teaching orientation and mobility. In K. M. Huebner, J. G. Prickett, T. R. Welch, & E. Joffee (Eds.), *Hand in hand: Essentials of communication and orientation and mobility for your students who are deaf-blind* (pp 576-614).

AFB Press.

Lolli, D. & Joffee, E. (1995). Approaches to teaching orientation and mobility. In K. M. Huebner, J. G. Prickett, T. R. Welch, & E. Joffee (Eds.), *Hand in hand: Essentials of communication and orientation and mobility for your students who are deaf-blind* (pp 615-644). AFB Press.

Texas School for the Blind and Visually Impaired (2010). <u>Environmental checklist for developing independence</u>.

TTAC Online (Aug. 2020). Math differentiated instructional strategies: Deaf-blindness.

Utley, B. L. (1993). Assessing the instructional environment to meet the needs of learners with multiple disabilities including students who are deaf-blind. *Deaf-Blind Perspectives*, 5-7.

Wiley, D (2019). <u>Ten issues to always consider when intervening for students with deafblindness</u>. Texas School for the Blind and Visually Impaired.

National Center on Deaf-Blindness, June 2021 nationaldb.org

The contents of this publication were developed under a grant from the U.S. Department of Education, #H326T180026. However, those contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Susan Weigert.



