



SEATING & POSITIONING



CUT- OUT INCLINED DESKS

Did you know?

Some moderate quality evidence supports the use of cut-outs desks with inclined surfaces to improve fine motor skills and classroom performance in children with motor impairments, such as cerebral palsy. However, some of the research is conflicting; therefore, the following recommendations should be evaluated when applied with a child to determine their effectiveness for that individual child.

What is a cut-out desk with inclined surface and where should it be used?

A cut-out desk with an inclined surface is an ergonomic, sloped work surface with a semi-circular cut-out to accommodate the torso. This design can be useful for children with motor impairments. The cut-out surface provides added support and stability to the torso and forearms to enhance fine motor skills, such as pencil motor accuracy, and writing. Cut-out desks, with or without inclined surfaces, are often used in the classroom, along with supportive classroom seating.



Image credit: CAP Furniture
<https://capfurniture.com.au/product/650-650-cutout-table/>



Image credit: School Outfitters
https://www.schooloutfitters.com/catalog/product_info/pfam_id/PFA_M7252/products_id/PRO18342



What are the best suggestions for classroom seating?

The following suggestions to help improve fine motor skills for school-aged children with motor impairments are based on clinical expertise as well as on primary research articles about studies involving children with cerebral palsy.

Desk or Table:

- Ensure good desk height (approximately 1 – 2 inches above bent elbow height depending on the child's height)
- Try out and compare the use of a cut-out and/or inclined desk surface
- Alternately trial use of a cut-out desk combined with a slant board
- Encourage the child to sit upright and positioned close to desk surface ("tummy touches table")
- Measure outcomes (e.g. posture, stability, writing legibility) and monitor over time to determine effectiveness



Image credit: School Specialty
<https://tinyurl.com/ycldw2j>

Seating:

- Ensure the child is well supported in chair/wheelchair
 - Feet should rest flat on floor or footrest(s) (knees typically bent at 90 degrees)
 - Ensure good seat depth with back well supported

Where can I find a cut-out desk?

- Ability Healthcare (ergobasicdesign.com) – custom sizing available
- Priority Posture Systems Ltd. (priorityposture.ca) – custom sizing available
- Motion Specialties (motionspecialties.com)
- Performance Health (performancehealth.ca/)
- School Specialty (schoolspecialty.ca)
- Rifton (rifton.com)

Prices vary depending on size, features and provider. Sunny Hill does not endorse any specific providers.

Where can I find a slant board?

- School Specialty (schoolspecialty.ca)
- Therapy Shoppe (therapyshoppe.com)
- Toys Tools and Treasures (toystoolsandtreasures.com)
- Tools for Kids (toolsforkids.ca)



Prices for slant boards vary depending on size, features and provider. Some are fixed and some fold flat for easier storage. Sunny Hill does not endorse any specific providers.

This resource has been developed by a team of occupational therapists at Sunny Hill Health Centre. The information included in this handout is based on current best available research and expert clinical opinion. Please contact your occupational therapist if you have any questions or concerns.

References

- Shen, I. H., Kang, S. M., & Wu, C. Y. (2003). Comparing the effect of different design of desks with regard to motor accuracy in writing performance of students with cerebral palsy. *Applied ergonomics*, 34(2), 141-147.
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