

Assistive Technology: Calming the Jitters

Fidgets, Alternative Seating, Weighted Vests, and Calming Apps

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CREATING THE NEXT®

Learning and Movement

- Research shows that movement increases blood and oxygen flow, which positively affects cognitive development, physical health, and mental well-being
- Keeping the body active promotes mental clarity by increasing blood flow to the brain, making activity vital to both learning and physical and neurological health
- Studies show that children who are more active exhibit better focus, faster cognitive processing, and more successful memory retention than kids who spend the day sitting still



Movement Helps Learning!

2003 study in American Journal of Occupational Therapy concluded that students with ADHD using ball chairs were able to sit still, focus and write more words legibly

2007 Mayo Clinic study concluded that a chair-less classroom increased attention and improved learning

2008 University of Central Florida study

- Children need to move to focus during a complicated mental task
 - Especially those with attention-deficit/hyperactivity disorder (ADHD)—fidgeted more when a task required them to store and process information rather than just hold it.

Music for Calming

- Studies have shown that music has a positive response on the brain
- Research has shown soothing music can decrease blood pressure, heart rate, and anxiety
- Researchers found that “music engages the areas of the brain involved with paying attention, making predictions and updating the event in memory”
- Can drown out background noise



DIY – Pencil Fidgets

- Pipe cleaners
- Rubber bands
- Pony beads
- [DIY pencil topper fidget toy](#)





Alternative Seating

Vidget Chairs

- Allows for movement
- Allows for sensory
- 3 ways to use
- Active seat
- Desk
- Stool
- Comes in many different sizes
- www.viggikids.com



vidget[®]
3-in-1 flexible seating system

Dump the Chair?

- Engages core muscles
- Less impulsivity
- Increase focus

<i>Height</i>	<i>Recommended ball size</i>
Under 4'8"	45 cm ball
4'8" to 5'3"	55 cm ball
5'4" to 5'10	65 cm ball
5'10 to 6'4	75cm ball

For kids 5 years and younger, always use a 45 cm ball.
(Exercise Balls for Dummies)



So Many Choices!

- Zenergy Ball Chair
- Kore Wobble Stools
- Scoop Chairs
- Disco cushion



Locus Seat by Focus

- Half standing/ half seating
- Encourages movement
- Might be good for science labs when table seem to be higher
- <https://www.fully.com/chairs/or-standing-desks/locus-seat-by-focal.html>



Standing Desks

- Good for students with ADHD
- Can assist with staying on track
- Can increase cognitive abilities



Fidget Footrests

- Standing desks can help students who find sitting still difficult
- Use of dynamic footrests can help release energy and improve focus



Anti-Fatigue Mats

- Topo Anti Fatigue Mat
- Wurf Board
 - Air Spring
- Butterfly Ergonomic Anti Fatigue Standing Desk Mat



Liquid Tile Mats

- Sensory tiles
- Can be moved around
- Step on them and watch the liquid move



Low Tech Fidget Ideas

- Placing Velcro under the desk so that students can touch and feel
- Create a standing/ moving circle for a quick break
- Carry some weighted books down the hallway or to another classroom
- Loop exercise band to chair or table legs
- Make and play with slime
- Play-doh
- Chewing gum/ hard candy

For Channeling Energy

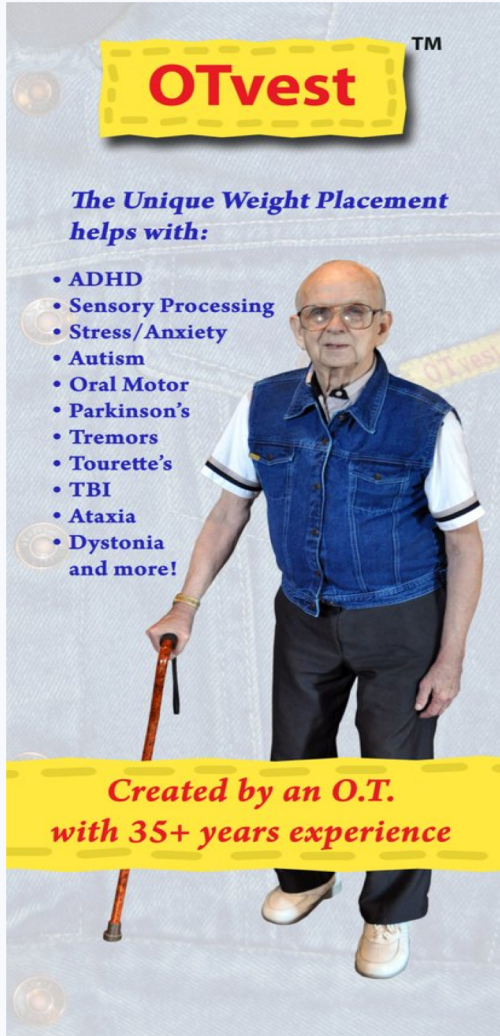
- Anxiety and nerves can be seen in students who bite their nails or pick at the skin
- Strategies:
 - Finger guards
 - Fidget items that can be torn apart
 - Fidgets that can be pulled
 - Therapy Shoppe makes a kit for those who pull hair or pick skin





AT for Physical and Emotional Supports

OT Vest

An elderly man with glasses and a cane is wearing a blue denim vest over a white shirt. The background is a light blue textured surface.

OTvestTM

*The Unique Weight Placement
helps with:*

- ADHD
- Sensory Processing
- Stress/Anxiety
- Autism
- Oral Motor
- Parkinson's
- Tremors
- Tourette's
- TBI
- Ataxia
- Dystonia
- and more!

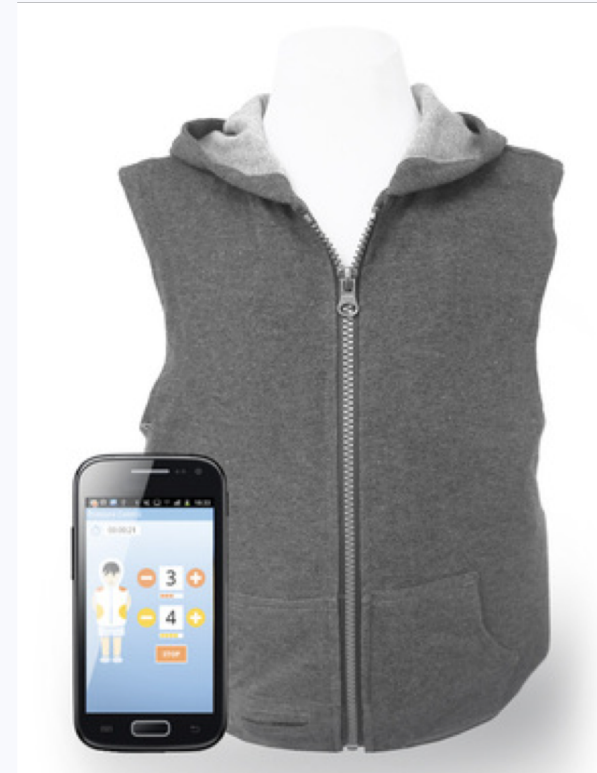
*Created by an O.T.
with 35+ years experience*

A young boy is wearing a blue denim vest over a white shirt. The background is a blue textured surface.

Experience
the calm and
stabilizing effect
of the denim, weighted,
OTvestTM

T. Jacket

- T. Jacket by T. Ware
- Wearable technology
 - Provides deep touch pressure to calm/soothe individual who is anxious or stressed
 - Pressure controlled via smartphone iOS or Android



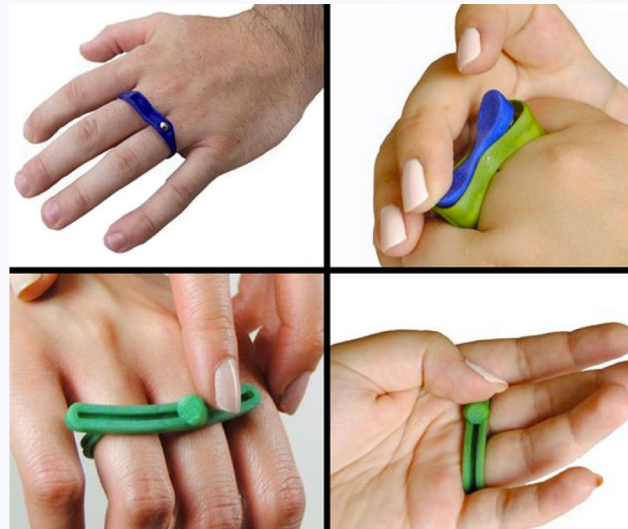
Other Wearable Compressions

- Work with an Occupational Therapist
- Compression Marble Maze Sleeve
- Weighted Sleeves for arms or legs
- Deep pressure compression belts
- Shoulder and lap weights



Fidget Ring

- Similar to fidget toys; except you can wear them!
- Helps for people who are anxious or have trouble focusing on the something



Fidget Suitable for Chewing

- Chewable pencil tops
- Chewable necklaces
- Chewable bracelets



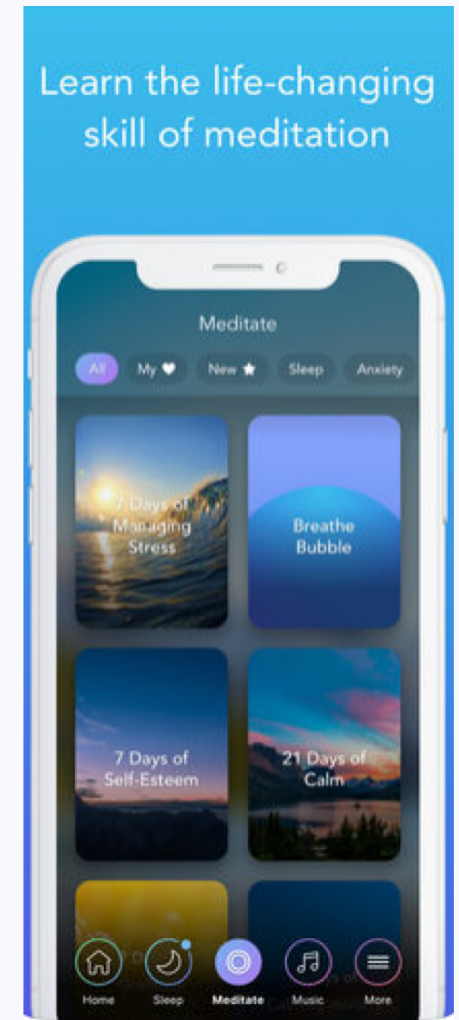
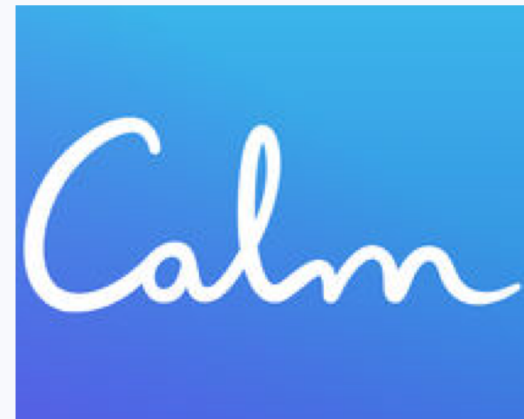
- Products for adult and children
- Preloaded audio sedation tracks
 - Acoustic masking signals work to make typically distracting noises unapparent to the user
 - Audio recordings to help with relaxation and focus
- <https://www.b-calmsound.com/>



Apps for Meditation/Calming

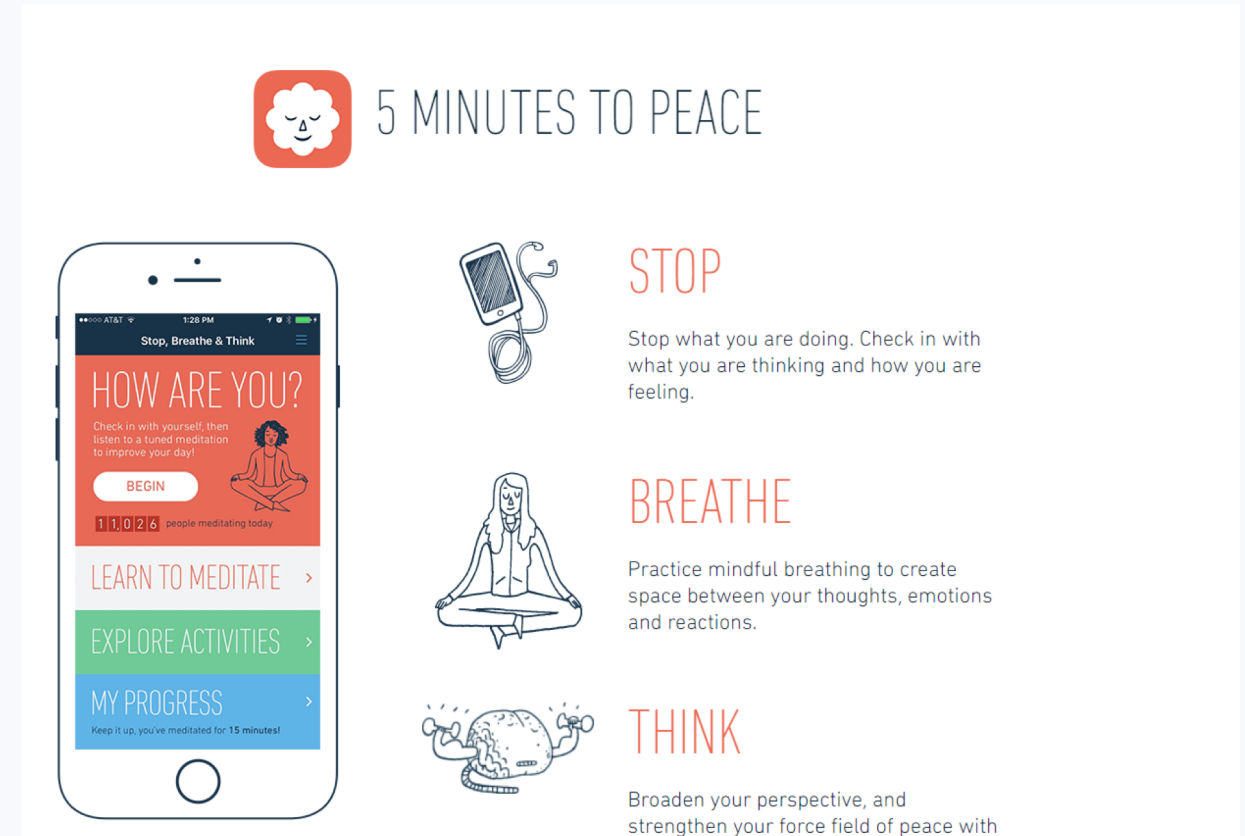
Calm

- FREE for Teachers
- The Calm School Initiative
- Guided meditations and mindfulness
- Pre K- high school
- <https://www.calm.com/schools>



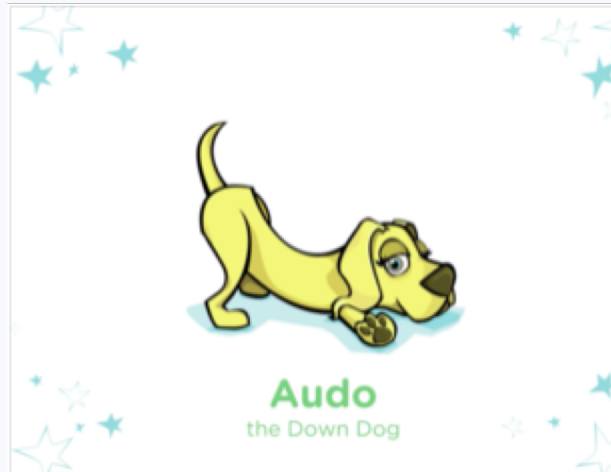
Stop, Breathe, Think App

- Ability to check-in with your feelings
- Short Activities
- Meditation Timer
- Track Moods and Progress
- Free but has in app purchases



Super Stretch Yoga HD App

- 12 Yoga Poses
- Animated videos to show how to do pose
- Breathing breaks
- Free





Brain Break!

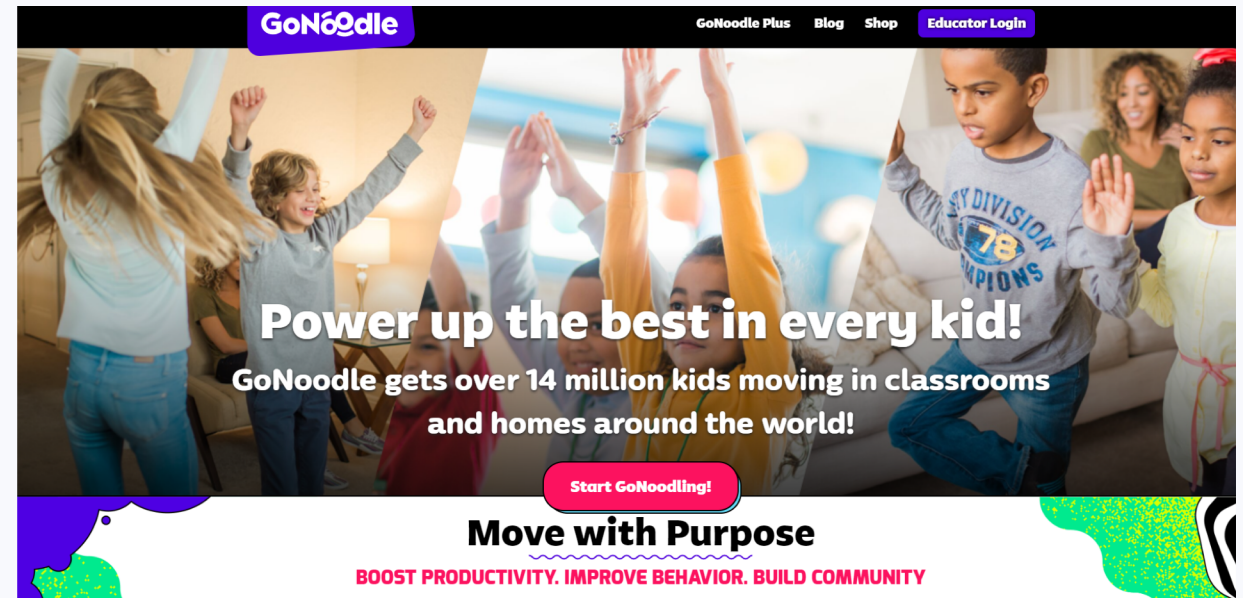
The Learning Station

- [The Learning Station](#)
- Brain Break with Movement
- Can allow for refocus after



[Brain Break Video!](#)

- Free to sign up
- Educators and Student login
- Lots of Categories
- Mindfulness
- Math
- Science
- Movement
- [The Llama Song](#)



Read and Ride Classes

- The ability to ride an exercise bike or use an under-the-desk bike while reading
- Ward Elementary in Winston-Salem, NC 2010
 - Showed an increase in test scores
 - “As the elementary school analyzed testing data at the end of the school year, they found that students who had spent the most time in the program achieved an 83% proficiency in reading, while those who spent the least time in the program had failing score – only 41% percent proficiency.”
- Students go by their own pace



Under-the-Desk- Solutions



Your TFL AppFinder: What Can I Find?



Search by:

- App name
- Categories
 - Books/reading
 - Education
 - Environmental adaptations
 - Hearing
 - Vision
 - Navigating
 - Cognition, learning, and development
 - Personal care and safety
 - Productivity
 - Communication
 - Therapeutic aids

Questions



Resources

- <https://www.edweek.org/tm/articles/2017/08/08/learning-in-motion-bring-movement-back-to.html>
- <https://www.opencolleges.edu.au/informed/features/standing-desks-every-classroom/>
- <https://literacyandlanguagecenter.com/the-benefits-of-movement-in-the-classroom/>
- https://www.educationworld.com/a_news/read-and-ride-program-finds-improvement-student-learning-454116210
- <https://www.fastcompany.com/3036607/this-school-has-bikes-instead-of-desks-and-it-turns-out-thats-a-better-way-to-learn>
- <https://www.fnu.edu/benefits-studying-music/>

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