

Respiratory Training Using Technological (Gaming) Solutions for Patients With Severe (Multiple) Disabilities















Ruud van der Wel

Respiratory therapist Rijndam rehabilitation Founder: My Breath My Music Foundation

Founder: NMAgaming

Owner: Audio Rhoon (assistive technology)

Innovator (Groovtube, apps, musical instruments)



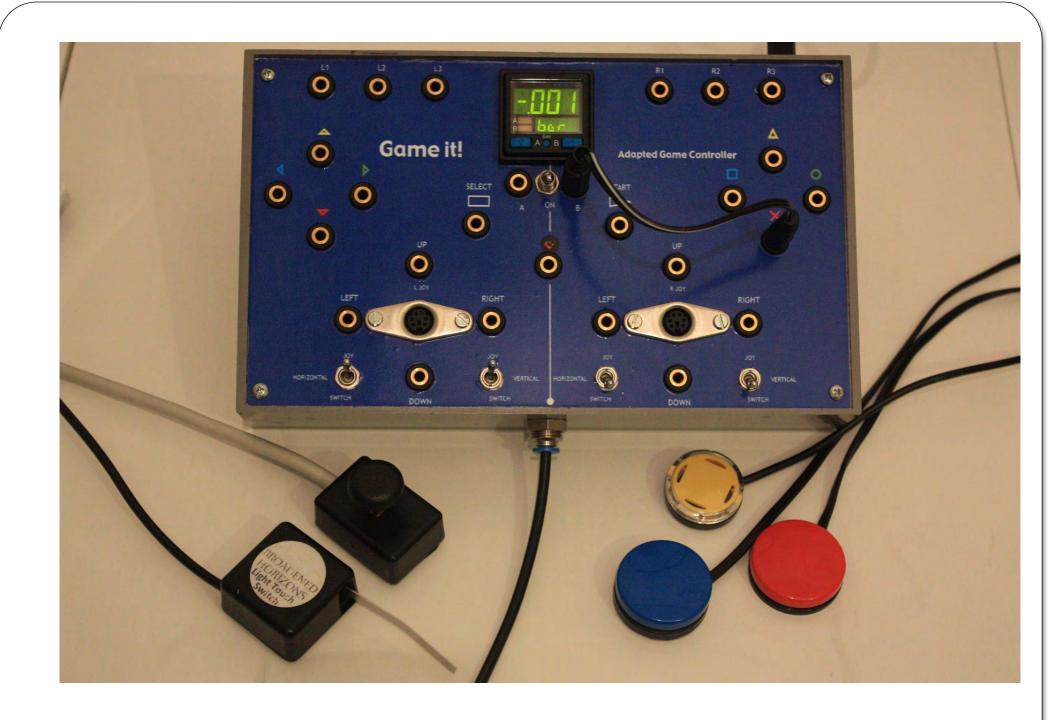


2000 Respiratory therapy with music instruments



2006 Magic Flute Brian Dillon (Unique Perspectives)



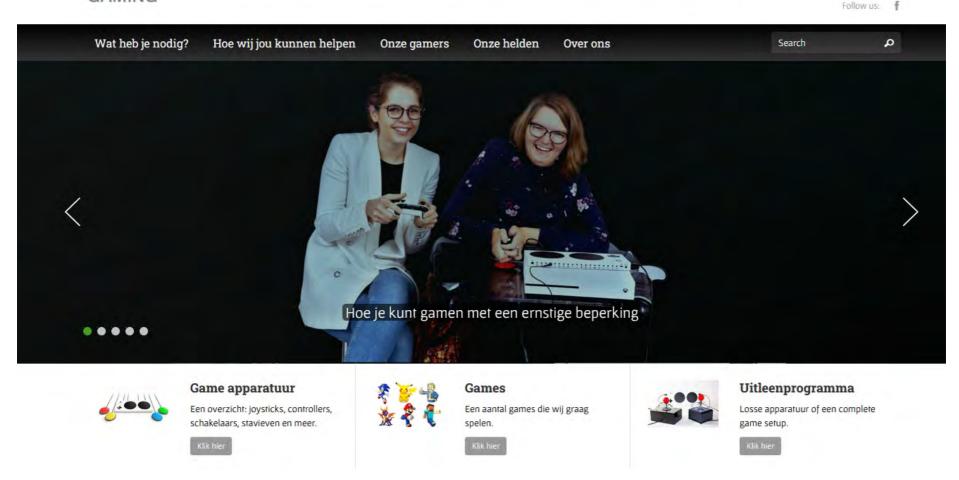


Januari 2020 - NMAgaming

How to game with a severe disability







The loan program

It is possible to borrow special gaming equipment through the foundation

We ask 50 euros per year!







2015 GroovTube

The GroovTube connects to the iPad via Bluetooth Smart. The airflow is recorded and converted into image effects in an app specially developed for this purpose.











That's how it was





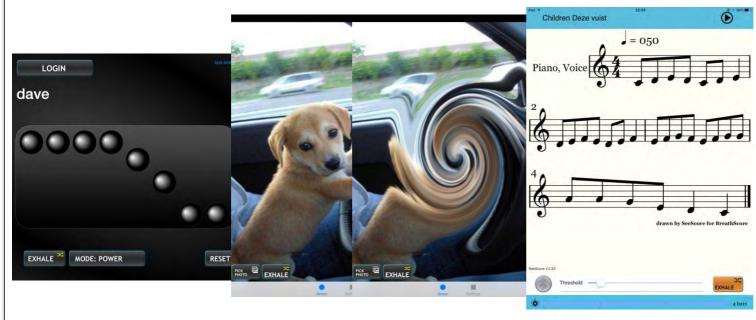




Using tablet = better motivation

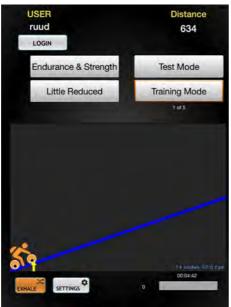


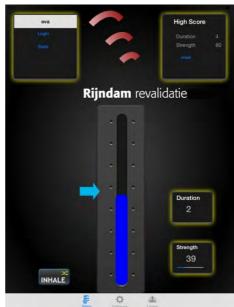
8 free apps with different training purposes. (App Store)







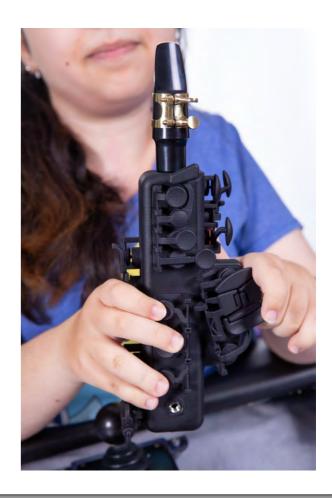






Last year Sara received the Adaptive Travel Sax





Antibacterial filter & mouthpieces











Getting used to breathing exercises





Inge Dijkhuizen - Children's physiotherapist



Manual for

- (Parents of) users
- Therapists (logo, physio, music, respitory)
- Very extensive user manual in which all questions from users are collected and elaborated
- Including training/exercise forms



The GroovTube is also used in combination with external exercise equipment

PEPmask







PEP stands for Positive Expiratory Pressure. It is a treatment to help people who have difficulty clearing sputum (phlegm) from their lungs.







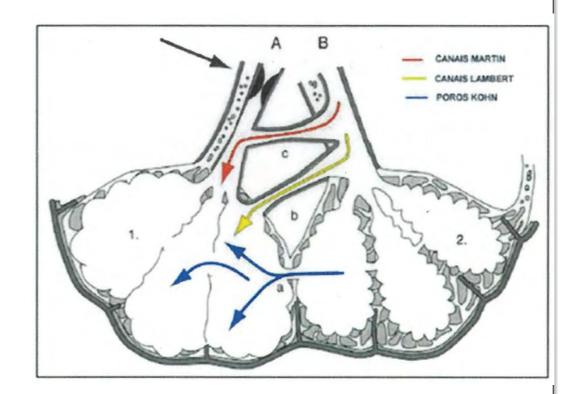


Pep



- Pressure and flow
- positive expiratory pressure.
- Inhalation normal, exhalation through small hole
- pressure build-up
- 2x daily 3 rounds 15 x





Powerbreathe and Threshold (and more)

Respiratory muscle training



Powerbreathe



IMT trainer Medic Plus Inspiratory Muscle Training



EMT trainer EX1medic Expiratory Muscle Training



Threshold









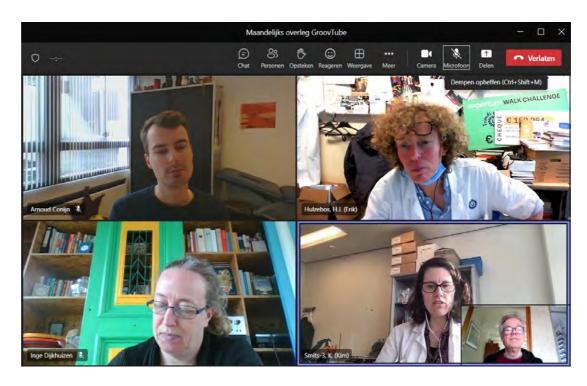
2023 - Collaboration with UMC Wilhelmina children's hospital

Kim Kant-Smits, MSc(Master Musculoskeletal) Pediatric physiotherapist and researcher Erik Hulzebos, Assistant Professor Medical Physiology - (sports) Physiotherapy

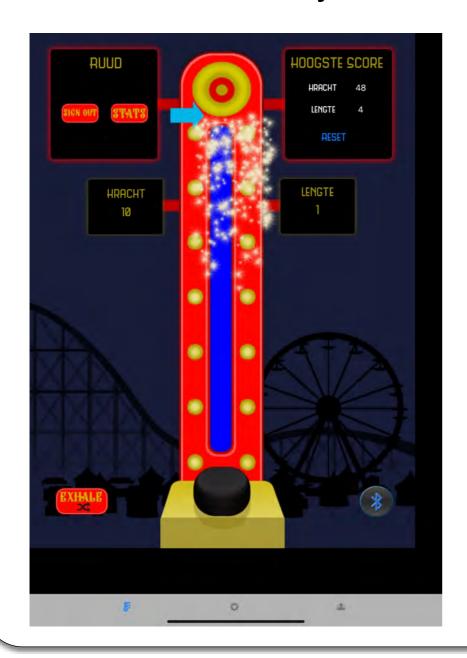


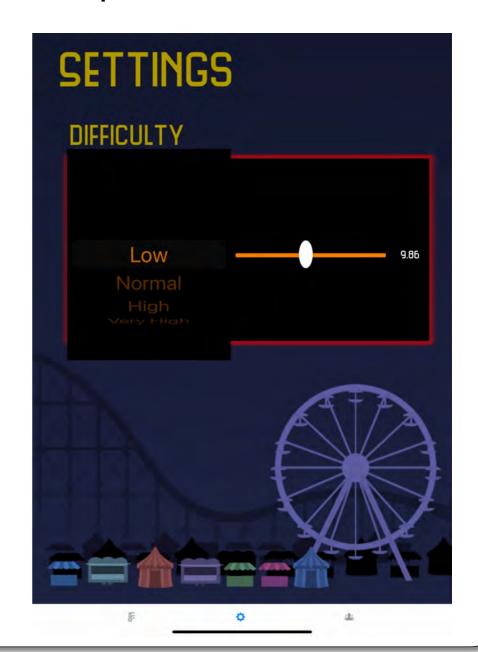
2025 Research Emma Children's Hospital (Amsterdam)

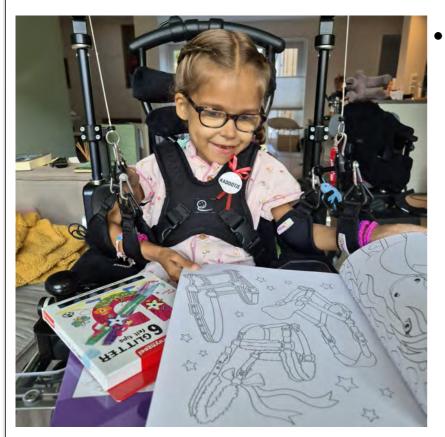
 Research: does the GroovTube have an effect on therapy compliance in young children?



Also useful for children with minimal breathing capacity = always a successful experience!







• Hi Ruud, a face without oxygen. We are convinced that working with the Groovtuve has been helpful in this. In recent weeks we have reduced the oxygen and since today we are looking at how it goes without extra oxygen when Elin is awake and has enough energy. Today she played for the first time for an hour without extra oxygen and she did well. A neat saturation of 97-100. Thank you very much for working with Elin despite all the reservations and concerns.

Groovtube = The ultimate breath controller

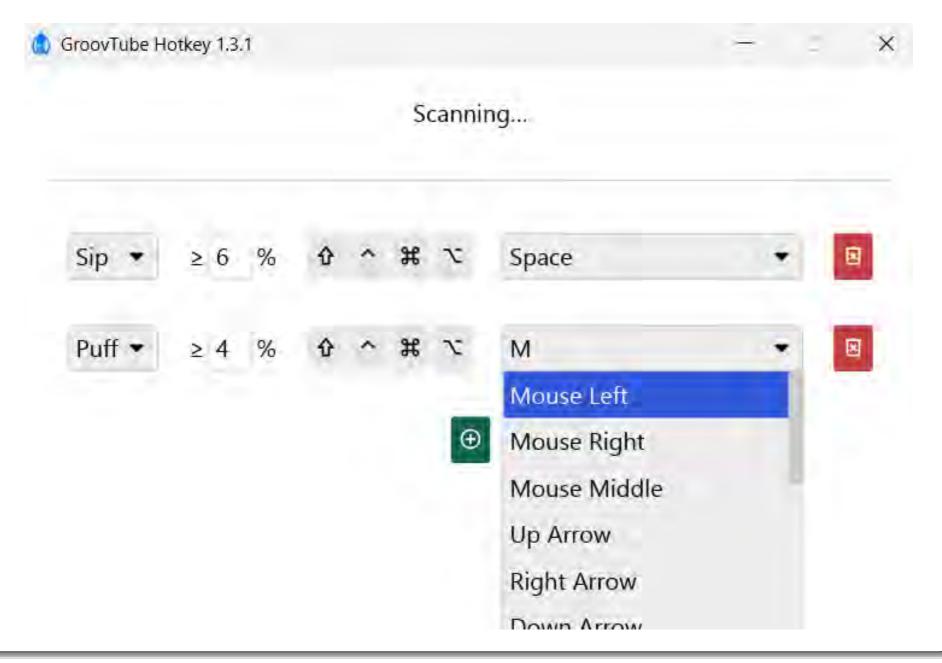
We always keep innovating.

We have developed a number of new Groovtube applications in the last year.

With great thanks to my son Joris!



New GroovTube Hotkey for PC en MAC



Gaming with the MyPuff switch



GroovTube cost € 1490,-

info@groovtube.nl





MY BREATH: MY MUSIC



In the Netherlands, parents can borrow the GroovTube from the My Breath My Music foundation for €240 per year

There is a solidarity fund for people who are less fortunate.

info@mybreathmymusic.com

Thank you for your attention



