



AT for People with Sensory Disabilities

Danny Housley
IDEAS 2018

AMAC Accessibility

AMAC creates practical solutions that work, with a focus on utility, ease of use, and high quality.

- **Accessibility Consulting** focuses on organizational accessibility needs with evaluation, technical assistance, customer support, and web accessibility solutions.
- **Braille Services** produces customized projects from both print materials and electronic text including partial books and chapters or graphics
- **Captioning Services** makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing.
- **Professional E-Text Producers** provide high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML.
- **Certified Assistive Technology team** provides on-site and remote assessments, demonstrations, training and technical assistance for education, work, and daily living environments.
- For more information: www.amacusg.org

Tools for Life

Tools for Life, Georgia's Assistive Technology Act Program, is dedicated to increasing access to and acquisition of assistive technology (AT) devices and services for Georgians of all ages and disabilities so they can live, learn, work and play independently and with greater freedom in communities of their choice.





**disABILITY
LINK**
the center for rights & resources



**Disability
Resource
Center**



MULTIPLEchoices
Center for Independent Living



Georgia's Assistive
Technology Act Program



C4ATX

Center4ATEXcellence



The Middle Georgia Center for Independent Living, Inc.

WALTON



options
for Independent Living

LIFE

Living Independence For Everyone
Health, Housing, and the 504 Project



**Coastal
Regional
Commission**
OF GEORGIA
AREA AGENCY ON AGING



BAIN, INC.
Center for Independent Living



Professional Development



Tools for Life offers online professional development to help you learn more about assistive technology strategies and solutions as well as the most recent information on AT devices and disability related issues and trends.

Webinar content and materials are developed and presented by one of the Tools for Life team members along with other regional and national leaders in the assistive technology community.

To join the TFL mailing list to receive our email announcements, visit www.gatfl.gatech.edu

AT Solutions Lab



What AT is the
right AT?

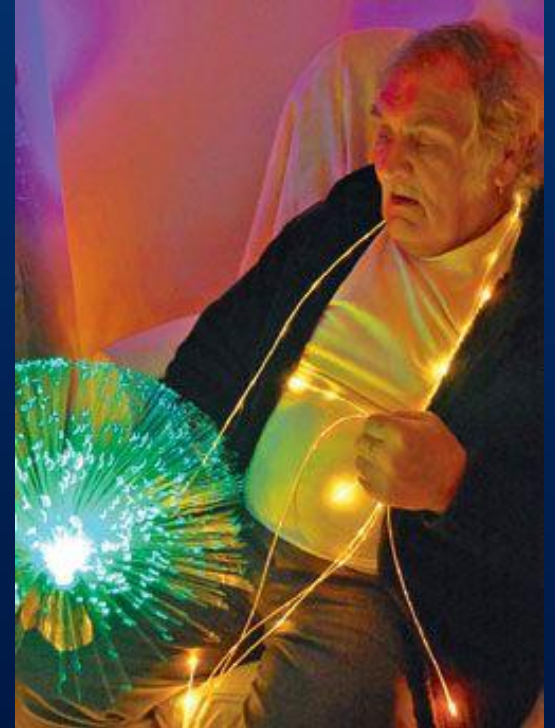
Snoezelen Rooms



- 1970s, Netherlands
- Very common in Germany
- Seeing more in the US
- Soothing
- Stimulate as many senses as possible
- Person is generally accompanied (“enabling practitioner”)
- Non-directive therapy

For All Ages

TOOLS *for* **LIFE**



Sensory Assessments



- Take time
- Many different methods
- All about experimentation
- Focus on one sense at a time



Further Resources



- National Autism Standards- UK

<http://www.aettraininghubs.org.uk/wp-content/uploads/2012/05/37.2-Sensory-assessment-checklist.pdf>

- Sensory Processing Disorder Checklist- Winnie Dunn, Ph.D, OTR, FAOTA

<http://www.spdparentzone.org/wp-content/uploads/2014/03/Sensory-Checklist.pdf>

Sensory Based Approach



Every Move Counts Click and Chats

Jane Edgar Korsten,
MS/SLP

Terry Vernon Foss, M. Ed.
Lisa Mayer Berry, MOTR/L

*every move counts
clicks and chats*
emc³

**Sensory-Based Approach:
Communication and Assistive
Technology**



Jane Edgar Korsten, MS/SLP
Terry Vernon Foss, M. Ed.
Lisa Mayer Berry, MOTR/L

Rating System



0 = no response

1= positive response

2= negative response

Gustatory responses should be administered after each section.

Vestibular and Proprioceptive




Vestibular- Sense of balance

Side to side, front to back, rotary and up and down

Proprioceptive- position and movement of the body

Sensory Assessment

name: _____ date: _____ examiner(s): _____


 Provide 3 tastes of one gustatory item when this symbol appears. Enter scores on #7.

1. vestibular - Provide movement for the time indicated for the activity and then pause for 5 seconds. Record response.
Note: Discontinue if blanching, gagging or seizure activity is observed.

position: _____ pre-task condition: _____

stimulus	response levels			response description
	trial	0	1	
side to side (10 seconds)	1			
	2			
	3			
front to back (10 seconds)	1			
	2			
	3			
rotary (5 seconds)	1			
	2			
	3			
up and down (5 seconds)	1			
	2			
	3			

score: _____ of _____ = _____%

 2. proprioceptive - Provide stimulus for 10 seconds and then pause for 5 seconds. Record response.

position: _____ pre-task condition: _____

stimulus	response levels			response description
	trial	0	1	
	1			
	2			
	3			
	1			
	2			
	3			

score: _____ of _____ = _____%


2007 - Every Move Counts, Clicks and Chats - Korsten, Foss and Berry 145

Tactile and Visual



Tactile- relating to sense of touch
Provide stimulus for 10 seconds,
withdraw for 5 seconds

Visual- field of vision
Move stimulus through all four
quadrants for 2-3 seconds,
withdraw for 5. Careful sound is
not included




3. tactile - Provide stimulus for 10 seconds and then pause for 5 seconds.
Record response.
Note: Do not apply stimulus to skin with a bruise, wound or rash.

position: _____ pre-task condition: _____

stimulus	response levels				response description
	trial	0	1	2	
1					
2					
3					
1					
2					
3					

score: _____ of _____ = _____%



4. visual - Move stimulus through central visual field and all four quadrants
(2-3 seconds per quadrant) and then withdraw from sight for 5
seconds. Record response and describe any differences across visual
field quadrants under the corresponding column.

Note: It is important that sound not accompany the visual presentation. Do not use
strobe or flashing lights. In the presence of CVI, select items with * from the
protocol. Present slowly and with movement. Allow 10 second response time.

position: _____ pre-task condition: _____

stimulus	response levels				quadrants				response description
	trial	0	1	2	UL	UR	LL	LR	
1									
2									
3									
1									
2									
3									

score: _____ of _____ = _____%

2007 - Every Move Counts, Clicks and Chats - Korsten, Foss and Berry 146

Auditory and Olfactory



Auditory- relating to hearing

Play sound at midline behind and slightly above head. 10 secs for music, 3 for noise

Olfactory- relating to smell.

20 seconds between items. Use scented and unscented items to tell the difference between reflexive and purposeful



5. auditory - During each trial, present sound at midline, behind and slightly above the head. Allow 10 seconds for music and 3 seconds for noise makers. Pause for 5 seconds. Record response.

Note: It is important that movement within the visual field not accompany the sound.

position: _____ pre-task condition: _____

stimulus	response levels				response description
	trial	0	1	2	
	1				
	2				
	3				
	1				
	2				
	3				

score: _____ of _____ = _____ %



6. olfactory - To differentiate between reflexive and purposeful responses, pass an unscented item under the nose for 3 seconds. If response to scented and unscented items is the same, the response is most likely reflexive (level 1). Score response made within 3 seconds of presentation or removal while allowing 20 seconds between presentations. Record response.

Note: Consider allergies and fragrance sensitivity.

position: _____ pre-task condition: _____

		response levels			
stimulus	trial	0	1	2	response description
familiar	1				
	2				
	3				
novel	1				
	2				
	3				

score: _____ of _____ = _____ %

Gustatory

Gustatory- relating to taste.

Do not administer if NPO (nothing by mouth). Suckers are a good method. Do not force rejected items. Self feeders should set their pace.



7. gustatory - Provide taste of food. Score response made within 5 seconds and then allow additional time necessary for food to be consumed. Record response.

Note: Gustatory should not be administered if individual is NPO (nothing by mouth). Consider suckers for individuals who can taste but do not have the oral motor control needed to eat. Allow self-feeders to set own interval. Do not force consumption of food that is rejected. (Score rejection as a '-' in the 2 column.)

position: _____ pre-task condition: _____

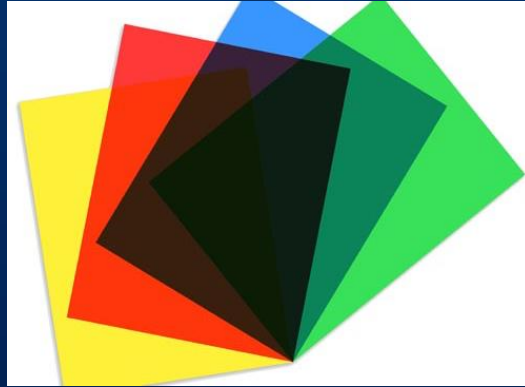
stimulus	response levels				response description
	trial	0	1	2	
sweet	1				
	2				
	3				
sour	1				
	2				
	3				
salty	1				
	2				
	3				
bitter	1				
	2				
	3				
pungent	1				
	2				
	3				
astringent	1				
	2				
	3				

score: _____ of _____ = _____ %



Visual Disabilities

AT for People with Visual Disabilities





Hearing Disabilities

AT for Hearing



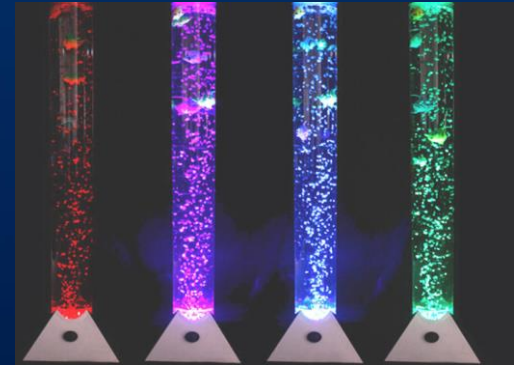


Stimulating the Senses

Light and UV Reactive Options



Texture and Movement



Sound and Taste

TOOLS *for* **LIFE**





Apps for the Senses

White Noise



- Free
- Nature sounds, fan, traffic, variety of options
- Can use your music library
- Timed



Midnight HD



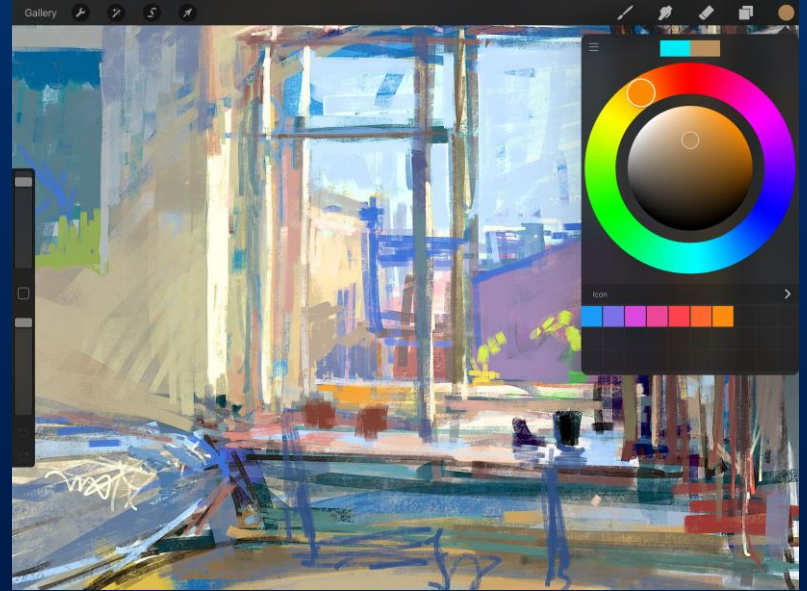
- .99 cents
- Particle simulator
- iPad
- Can use up to ten fingers to create shapes, alter particle flow, etc



Procreate



- \$5.99
- Drawing/painting app
- Fingers/stylus/apple pencil
- Art without the mess/sensory overload



Questions?
Comments?
Small Jokes?

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TOOLS *for* LIFE

Georgia's Assistive Technology Act Program



Disclaimer



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