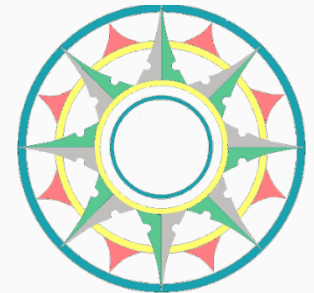


It's all downhill from here!

Helping people with ASD or I/DD get on skis

Peter Doehring
ASD Roadmap



With special thanks to

Chris Baker



Double H Ranch & Gore Mountain


2022





What I did before

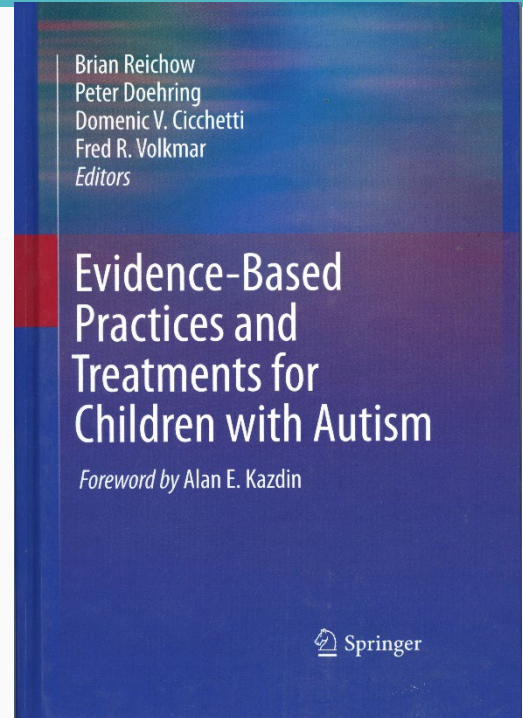
Clinician, educator, researcher, author, advocate & program leader

Autism Services Across America

Road Maps for Improving
State and National Education,
Research, and Training Programs



PETER DOEHRING
Foreword by Fred Volkmar





What I do now

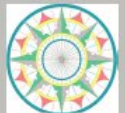
- ❖ Independent research on translation of science into practice

S.I. :Autism in Review: 1980-2020: 40 years after DSM-III | [Open Access](#) | [Published: 11 May 2021](#)

Does the Arc of Science Bend Towards Impact? Four Decades of Empirical Research Published in JADD Since the DSM-III

[Peter Doehring](#) 

Journal of Autism and Developmental Disorders **51**, 4411–4421 (2021) | [Cite this article](#)

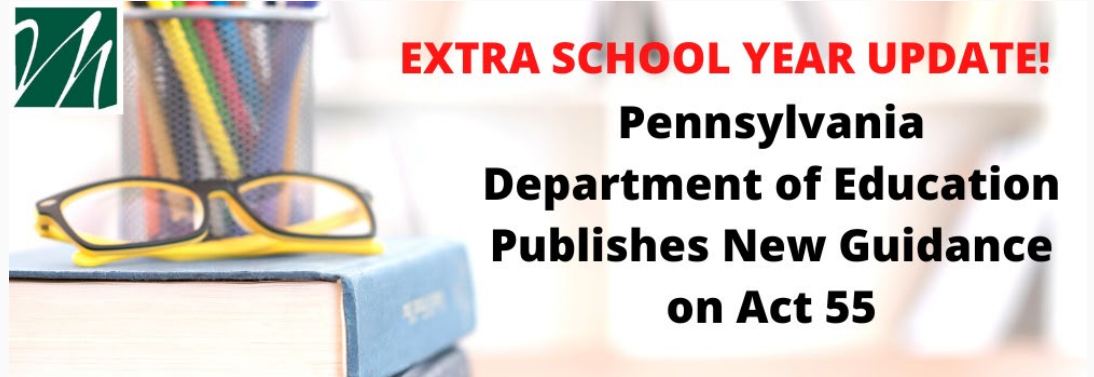




What I do now



- ❖ Advocate for statewide policy change





What I do now

- ❖ Develop new local resources for work and volunteer activities



Kennett
Ability
Network



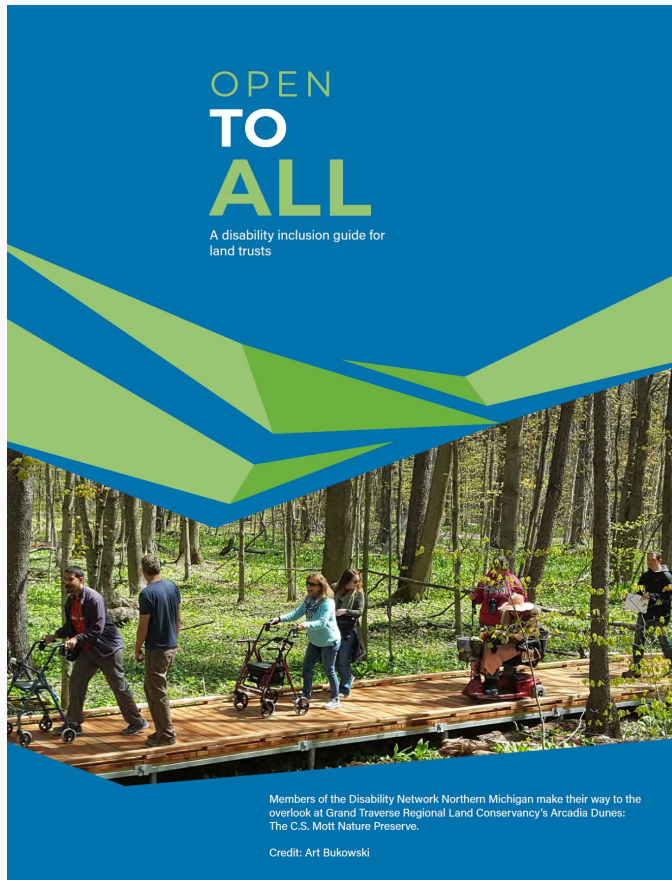
Kennett Area
Community Service





What I do now

- ❖ Explore new practices in outdoor recreation and environmental stewardship





Gaps in health in ASD/IDD

- ❖ Physical health
 - Little participation in active recreation
 - Magnifies co-occurring health conditions
 - Elevated rates of obesity
- ❖ Behavioral health
 - Social isolation and boredom
- ❖ Impacts greatest amongst those with more significant levels of I/DD
- ❖ Parallel impacts for caregivers



Our long-term goal for Margot

A range of fun activities we could enjoy outdoors as a family, starting with summer

- Biking shared use paths with a trailer (2011)
- Added kayaking (2012)





Our long-term goal for Margot

- ❖ Expanded options
 - Tandem biking (2016)
 - Trail biking (2017)





Our long-term goal for Margot

- Weekly hikes at home (2018) & then school (2019),
Expanding these significantly to cope with COVID





Our long-term goal for Margot

- ❖ Winter hikes & Fat tire biking (2020) build tolerance for cold





Our long-term goal for Margot

- ❖ Added Tubing & adaptive skiing (2018)!





Progressive Access model

1. Identify resources

Assess abilities
& interests

Identify
partners

Equipment &
facilities

2. Take first steps

Test effort &
stress

Identify
barriers

Build a
routine

3. Build capacity & resilience

Stretch
comfort zone

Expand
experiences

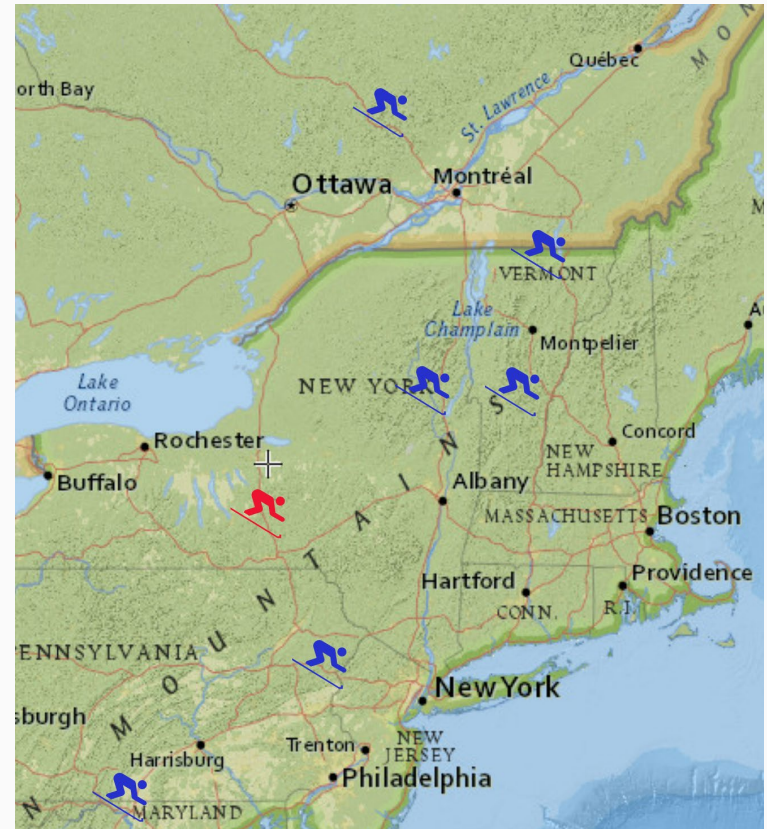
Tolerate all
conditions



Identify resources

Finding a specialized program

- ❖ Outdoor adaptive recreation programs address all three elements
 - Found in every state
 - A surprising number of ski hills have adaptive programs



Assess abilities
& interests

Identify
partners

Equipment &
facilities



Identify resources

Recreational partners

- ❖ Adaptive Ski instructors
 - Regular ski instructors who have completed specific certifications
- ❖ Volunteers who help with other tasks
- ❖ Some definitely work with school programs!

Identify partners





Identify resources

Adapted equipment

- ❖ Full range of options seen [here](#)
 - Skis with outriggers
 - Snow slider
 - Sit-ski/sled

Equipment & facilities



Outriggers



Bi Ski



Mono Ski



Snow Slider



Identify resources

Adapted equipment

Equipment & facilities





Identify resources

Adapted facilities

- ❖ Adapted lift procedures
 - Slowing or stopping lift at bottom and top
- ❖ Option to utilize gondola

Equipment & facilities





Identify resources

Adapted facilities

Getting on the lift





Identify resources

Educational partners

- ❖ Could be a teacher or a parent
 - Review difficulties re strength /coordination
 - Help understand & communicate with child
 - Identify accommodations
 - Anticipate triggers
 - Monitor comfort



Identify resources

Educational partners

- ❖ All good, behaviorally-based teaching strategies will apply, with adaptations
 - Lots of reinforcement
 - Prompting, fading, and chaining
 - Build a **functional** ski routine
 - Use OT/PT to tackle specific issues



Take first steps

Test Effort and Stress

- ❖ First “lesson” on skis to broadly identify effort & stress
 - Consult with instructor about what to start on
 - Get child on skis
 - Full support sliding and then going downhill
 - Monitor carefully for effort & stress

Test effort & stress



Take first steps

Test Effort and Stress



First time on skis!



Take first steps

Test Effort

- ❖ Effort: Strength, coordination, and endurance to ski downhill
 - Factor in getting to/from hill, & on/off lifts
- ❖ Skier must learn all of the skills every new skier must learn PLUS other demands due to lack of exercise
 - Be prepared to end quickly!
- ❖ Partner: Heightened demands for control
 - Must turn and stop for two
 - Additional weight can throw balance off



Take first steps

Test Effort

- ❖ Good planning & accommodations help to save effort for skiing downhill!
- Fine-tuning equipment to get the right stance





Take first steps

Test Stress

- ❖ Stress: Anything that makes a skier anxious or uncomfortable
 - Quickly magnified by fatigue or discomfort
- ❖ Skier
 - Initial uncertainty of new routines
 - Aversion to physical prompting & redirection
 - Frustration at having to wait



Take first steps

Test Stress

❖ Partner

- Planning for two, especially surrounding safety issues on lifts & while skiing
- Must move smoothly in real time (at 15-20mph!)
- Fine-tuning technique
- Practice, familiarity with the run, and a 2nd pair of hands makes **ALL** the difference!



Take first steps

Test Stress

- ❖ Stress of riding and then getting off lifts





Take first steps

Test Stress

- ❖ Comfort is key
 - Passive skier will become colder more quickly
 - Active skiers expend a lot of effort and can quickly tire and overheat
 - Assess which layers are needed and adjust!!
 - Tighten routines to dress quickly and avoid getting too hot / cold / bored waiting around



Take first steps

Effort, stress, and weather

- ❖ Effort and stress will vary greatly with weather conditions
 - Icy slopes doubles the stress
 - Sticky snow doubles the effort
 - Cold can sap energy, especially when riding long lifts



Take first steps

Effort, stress, and weather

- But eventually your skier can learn to tolerate the cold to have fun!!



Wind & sleet won't stop her!



Take first steps

Test Effort and Stress

- ❖ 1st Goal: Find comfort zone
 - How long can you ski for? How many runs?
 - How much of a break do you need?
 - Margot can tolerate a morning (10am) & afternoon (1:30) outing of 75 -90 minutes with a 2 hour break



Take first steps

Test Effort and Stress

❖ 2nd Goal: Find “edge” of ability to be thrilled!



Margot's first blue run!



Take first steps

Identify barriers

- ❖ Walk through sequence at hill to eliminate waiting
 - First visit without your skier
 - Consult with instructor before bringing child to hill
 - Map distance to lifts (use a Wike)
 - Planning for crowds (Go to front of line?)
 - Get your own equipment if possible
 - Make a budget!

Identify
barriers





Take first steps

Build a comfortable routine

- ❖ Walk through entire day
 - Getting dressed & to the ski hill
 - Go straight to lifts
 - Pre-/apres-ski
 - Build in downtime

Build a routine





Take first steps

Build a safe routine

- ❖ How do you get on and off lift
(Bus harness helps!)
- ❖ Do regular equipment checks
- ❖ Instructors are very safety conscious
 - Can you become the ski partner?
Requires training and patience

Build a
routine

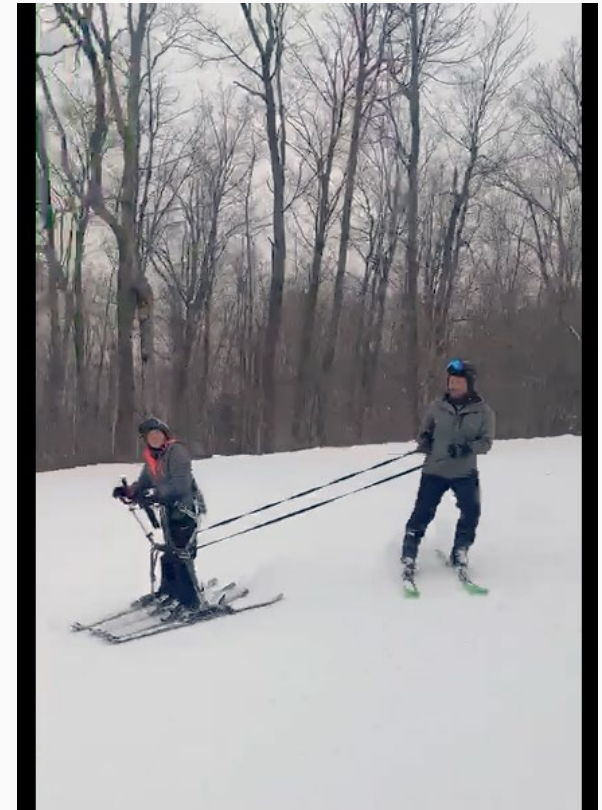


Progressive Access model

3. Build capacity & resilience

Stretch
comfort zone

- ❖ Stretching OUR zone as instructors



Practicing my turns



Progressive Access model

3. Build capacity & resilience

Expand experiences

❖ Become able to ski independently as a family



Margot at Mt Tremblant



The surprise!

The special connection of shared thrills

- ❖ New activities feel risky, so we need a leap of faith
 - Can we keep everyone safe?
 - Will we be disappointed (again)?
- ❖ Protect children from failure/discomfort & they may never be thrilled
- ❖ We bring children to the edge of their abilities, and experience the special bond of achieving a State of Synchro