2017 Texas Symposium on DeafBlindness
Overview of the Benefits of Outdoor Activities with People who are Congenitally DeafBlind
Friday, Keynote
March 3-4, 2017

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Developed for
Texas School for the Blind and Visually Impaired
Outreach Programs
PowerPoint Content

Overview of the Benefits of Outdoor Activities with People who are Congenitally DeafBlind

Joe Gibson

How did I get to be here in Texas?

Outline

• Brief overview of my research
• What do I mean by outdoor activities?
• What are the benefits of these outdoor activities to people who are congenitally DeafBlind

My Research

• Aim of research
  • To understand the experiences of two congenitally DeafBlind men participating in outdoor activities
  • Two participants
  • Partners not subjects (they are the experts)
  • Long term study (eight years)

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Initial observations showed a range of benefits to people who are congenitally DeafBlind from participating in outdoor activities:

• New stimulating experiences
• Increased learning opportunities
• Health
• Personal & Social development

(Gibson, 2000)
Research Process

What Activities?
Snow based

Figure 1 Graphic showing the research process used by Joe Gibson.

Figure 2 Three people skiing with a young DeafBlind man being led by two dogs.

Figure 3 Two people on a sledge.
Figure 4 A sledge crashed into the snow...

Figure 5 A group ice fishing.

Figure 6 Preparing to go dog sledging.

*Water based*

Figure 7 Young DeafBlind man rafting.
Climbing & abseiling

Figure 8 Young DeafBlind man kayaking with Joe.

Figure 9 A group sailing.

Figure 10 DeafBlind man climbing at a man-made wall.

Figure 11 DeafBlind man climbing at a man-made wall.
Figure 12 DeafBlind man climbing at a natural crag.

Figure 13 DeafBlind man climbing at an inside climbing wall.

Figure 14 DeafBlind man abseiling off an old railway bridge...

Figure 15 DeafBlind man climbing at an inside climbing wall during a climbing competition.
Camping

Figure 16 A pile of sleeping bags and reindeer skins next to a fire.

Figure 17 Someone emerging from the pile of sleeping bags and reindeer skins.

Gardening

Figure 18 DeafBlind man gardening (plants are in an old bath tub).

“Den enkle er ofte det beste”
(simple is often the best)
Figure 19 A group walking on a flooded path.

Figure 20 Two people walking up a snowy slope.

Figure 21 Crossing a bridge in the rain.

Figure 22 A group sitting next to a river in the sun.
Why Outdoor Activities?

• What are the benefits?
• Why should we be doing them?
• Why do we need to know?
  – Offer the best service
  – Get funding!
Gilliam’s continuum of how adventure therapy is perceived

Figure 26 Graph showing a continuum of physical activity running from Recreation (fun, relaxing) and Therapy (clinical, recovery oriented). All physical activity burns off energy, increases co-ordination.

Gilliam, 1993, p. 212

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Leisure ← Health → Learning

Fun or interesting experiences

Identity

Leisure Activities

• Particular issue for people with complex disabilities
• Ability to participate
  – Learning about activities
• Sense of identity
  – Who am I?
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Leisure  Health  Learning

Fun or interesting experiences  Improve cardiovascular fitness/motor control (Incidental exercise)
Encourage a better sleep pattern
Stimulation and development of vestibular system

Identity  Improve mental health

Healing nature

Egil W. Martinsen

Figure 27 The covers of two Norwegian books called "Mind and Body".
### Healing Nature

“There is evidence that contact with the natural world — with animals, plants, landscapes and wilderness — may offer health benefits”

Frumkin (2001, p. 238)

#### A dose of nature

Medical research from around the world demonstrates that a Green Prescription can deliver physiological and psychological benefits for patients, even if the exact mechanisms by which these accrue are not yet fully understood. The evidence also shows that doctors are ready and willing to give Green Prescriptions, and that an effective partnership with other providers is required.

Bloomfield D, (2014)
Leisure  Health  Learning

Fun or interesting experiences  Improve cardiovascular fitness/motor control (Incidental exercise)

Encourage a better sleep pattern

Stimulation and development of vestibular system

Learning about yourself  Learning about others

Identity  Improve mental health

Healing nature

Relationships

- Relationships between the participants
  - BC & RT Relationship
    - Steep path example
    - River crossing example
  - Friluftskurs relationships
    - peer to peer relationships “my group”

Figure 28 Two DeafBlind men laying on a reindeer skin next to a fire.
Figure 29 Two young DeafBlind men exploring each other in a mountain cabin.

Figure 30 Two DeafBlind men sitting seemingly ignoring each other.

Figure 31 Two DeafBlind men sitting in a bench together.

Figure 32 Two DeafBlind men sitting next to each other on a reindeer skin.
Relationships

- Relationships with peers
- Relationships with support staff

Figure 33 A DeafBlind man relaxing on the beach with his support worker.

Relationships with support staff

- Residential experience
  - Cognitive dissonance for both
- Support sometimes staff less experienced
- Friluftkurs experience
  - Support staff as peers

Relationships

- Relationships with peers
- Relationships with support staff
- Relationships with external professionals
- Relationships with the public
- Relationship with the environment

Bua Mi relationships

- Tormod and Petter
- Tormod, Petter and the carpenter
- Tormod, Petter and their support staff
- Tormod, Petter and visitors to Bua Mi
- Tormod, Petter and making a building
- Tormod, Petter and Bua Mi
Leisure Health Learning

- Fun or interesting experiences
- Improve cardiovascular fitness/motor control (Incidental exercise)
- Encourage a better sleep pattern
- Stimulation and development of vestibular system
- Identity
- Improve mental health
- Healing nature

Annie Sullivan quote

“Our happiest school room was the roadside or a field beside the Tennessee River…”

Learning opportunities

- Learning about the self
- Learning about society
- Activity related learning
- Learning about the environment

Learning opportunities

- Activity related learning
  - How to tie a knot
  - What is a map
  - How to walk with poles
  - How to paddle a canoe

* I will talk more in my second talk about how to introduce and “do” the activities…

Cognitive

“In sum, we have shown that simple and brief interactions with nature can produce marked increases in cognitive control.”

Berman, Jonides & Kaplan (2008, p. 1211)
Neurology

  - experiencing work (activity/movement) in an environment is of direct benefit in helping the mind correct artificially imposed visual impairments.
- Hodgkin’s (1997)
  - discusses the importance of tacit knowledge (touch) in meaning making.

My Hypothesis

Participation in activities in the natural environment may then help people with sensory impairments build up a “picture” of the world through a physical engagement with it.

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Figure 34 Cover of “Curriculum for excellence through outdoor learning.

Figure 35 Poster from TCV Scotland showing an overview of subject areas that could be addressed through outdoor activities which includes Sciences, Mathematics, Health and Wellbeing, Languages, Expressive Arts, Social Studies, Technologies and Religious and Moral Education.
Leisure Health Learning

Fun or interesting experiences  Improve cardiovascular fitness/motor control (Incidental exercise)  Learning about yourself

Encourage a better sleep pattern  Learning about others

Stimulation and development of vestibular system  Learning about the world

Identity

Improve mental health  Learning to communicate

Healing nature

Communication Development

Why focus on communication?

Figure 36 Graphic: Large arrow pointing to the right. On top of the arrow are three text boxes with the following: 1) Research aim: to understand the experiences of two congenitally deafblind men participating on outdoor activities; 2) The participants need to be able to communicate about their feelings; 3) We need to understand when the participants communicate in this declarative manner.
Inspiration for the process

- The process used (trying to “talk” about experiences of events) was inspired by the work of Norwegian Gunnar Vege shown in the video Traces. (Vege, Bjartvik & Nafstad, 2007)
- While Gunnar used everyday day activities I used outdoor activities like climbing.

“Marking” moments

- Concept from the outdoor literature “punctuating” moments so you can refer back to them later.
- Have to mark/punctuate in a tactile way…
- Difficult sometimes, as what is interesting to you may be different from your partner…

Figure 37 Image from a short video from an environmental session showing us talking through the route that shows what the participant finds interesting…
Figure 38 Graphic - See graphic description below.

Top box in the graphic which sets atop a large arrow point down with the title “Aim”: Outdoor education with DeafBlind adults

Arrows from each side of this box point downward to two other boxes.

On the left the first box reads: Stimulating activities (Authentic, memorable, experiences — something interesting to talk about).

The box below it reads: Follow up work (Conversation sessions, art work, video analysis)

On the right the first box reads: Relationships (Interactive, shared experiences — someone to talk to).

The box below it reads: Follow up work (Conversation sessions, art work, video analysis)

Box at the bottom that both left and right arrows and large middle arrow (Aim) point to reads: Communication development.
Figure 39 Graphic - see description below.

Series of text boxes.

Top box reads: Outdoor Education with congenitally DeafBlind people.

An arrow points downward to a larger box containing three interrelated boxes within it: 1) Reads: Nature of activities and outdoor environment (Physical, tactile and sensory – a way to remember and talk); 2) On the left reads: Stimulating activities (Authentic, memorable, experiences – something interesting to talk about); 3) Relationships (Interactive, shared experiences – someone to talk to).

From the larger box an arrow points downward to the next box.

This box reads: Follow up work (Conversation sessions, art work, video analysis)

An arrow points downward from this box to the last box.

This box reads: Communication development with congenitally DeafBlind people.
Figure 40 Graphic: Three interrelated boxes: 1) Reads: Nature of activities and outdoor environment (Physical, tactile and sensory – a way to remember and talk); 2) On the left reads: Stimulating activities (Authentic, memorable, experiences – something interesting to talk about); 3) Relationships (Interactive, shared experiences – someone to talk to).

Figure 41 DeafBlind man sitting on a reindeer skin in the snow.

Figure 42 DeafBlind man exploring the snow.
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Figure 43 DeafBlind man in a full body climbing harness.

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Figure 44 Young DeafBlind man (and me) exploring a ski pole with our mouths.

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Figure 45 A DeafBlind man crossing a river with his support staff.
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Figure 46 A DeafBlind man exploring the wet sand while kneeling in the sea.

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Figure 47 A DeafBlind man exploring the wet sand while kneeling in the sea.

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Figure 48 A DeafBlind man exploring the dry sand on the beach.
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Figure 49 A DeafBlind man and support worker exploring a recently caught fish.

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Leisure ← Health → Learning

Fun or interesting experiences → Improve cardiovascular fitness/motor control (Incidental exercise)

Encourage a better sleep pattern → Learning about yourself

Stimulation and development of vestibular system → Learning about others

Learning about the world → Learning to communicate

Identity

Improve mental health

Healing nature

Chart showing relationships between Leisure, Health, and Learning.

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Figure 50 Graphic: Health, Education, Leisure appear in a triangle moving from top clockwise. Arrows are drawn between them going both ways. An arrow points downward from Health to the line between Leisure and Education. A line from Education point up and to the left to the line between Leisure and Health. An arrow points up and to the right from Leisure to the line between Health and Education.
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Figure 51 Graphic showing Leisure, Physical, and Education or therapy at the top with arrows pointing to the left and right of physical. At the bottom the phrase “Not mutually exclusive” is written with arrows pointing upward from it to Leisure, Physical and Education or therapy.

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Chart showing relationships between Leisure, Health, and Learning. The words “Aspirational benefits with an arrow pointing right appears in read between this heading and the remainder of the chart.

Aspirational benefits
- Work – paid/voluntary
- Competitive sport
- Certificated Projects & Exhibitions
**Employment**

Two men who worked for me, one as a gardener and one as a walk leader.

- **Gardener**

  ![Figure 52 DeafBlind man standing near a garden shed.](image1)

  **Figure 52** DeafBlind man standing near a garden shed.

- **Walk leader**

  ![Figure 53 DeafBlind man standing near a map marking a hiking trail.](image2)

  **Figure 53** DeafBlind man standing near a map marking a hiking trail.

**Competitive sport**

![Figure 54 Two photos: A DeafBlind man participating in a climbing competition and receiving his prize.](image3)

**Figure 54** Two photos: A DeafBlind man participating in a climbing competition and receiving his prize.
Certificated Projects & Exhibitions

Figure 55 A DeafBlind woman exploring her art work hanging on the wall in an exhibition.

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Leisure → Health → Learning

Aspirational benefits

Fun or interesting experiences → Improve cardiovascular fitness/motor control (Incidental exercise)

Natural snoozlen or sensory room → Encourage a better sleep pattern → Increased motivation

Functional assessment → Stimulation and development of vestibular system → Increased vitamin D

Identity → Improve mental health

Benefits for Caregivers → Stabilized bowel movements → Learning to communicate

Learning about yourself → Learning about others → Learning about the world

Graphic: Added to the chart previously shown are: Under Leisure, Natural snoozlen or sensory room, Functional Assessment and Benefits for Caregivers. Between Health and Learning another column appears: Increased motivation, Increased vitamin D, and Stabilized bowel movements.
DeafBlind International Outdoor Network

- Group of DeafBlind people, families and staff who enjoy or use the outdoors
  - Mailing list – just give me your details
  - Facebook page (Outdoor Network, DeafBlind International)
  - Annual meeting…

Two questions…

- Are there any activities that are not possible with people who are congenitally deablind?
- Are there any other benefits of activities that people have recognized that I have not mentioned?
Texas School for the Blind & Visually Impaired
Outreach Programs

Figure 56 TSBVI logo.

IDEAs that Work

*This project is supported by the U.S. Department of Education, Office of Special Education Programs (OSEP). Opinions expressed herein are those of the authors and do not necessarily represent the position of the U.S. Department of Education.*

Figure 57 IDEAs that Work logo and OSEP disclaimer.