Science For All:
Expanding the reach to people with disabilities

Science Centre World Summit 2017
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A Global Perspective

1 Billion people live with a disability

= 7.4 Billion
Plight in Africa
In South Africa

2.9 million of the total population of 51.8 million people reported having a disability in Census 2011.

South Africa 7.5%
Science Centres in Context
Accessibility of Science Centres to people with Disabilities:

- Not Accessible: 0%
- Moderately Accessible: 55%
- Very Accessible: 45%

Infrastructure / Assistive Tools available for people with disabilities:

- Ramps: 40%
- Disabled Toilets: 15%
- Elevators: 15%
- On flat ground: 15%
- Tactile signage: 15%
- Wide Spaces: 15%
Staff Attending Sensitization Training towards people with Disabilities

- 82% No
- 18% To some extent
- 0% Yes
Staff Training is Essential!

P.A.D.I
People for Awareness on Disability Issues

“My cousin has autism and the educator was very patient and helpful. Such a pleasure”

UNISA
Department of Science & Technology Education
Categories of Disabilities Visiting Science Centres

- Blind or Visually impaired
- Deaf or Hard of Hearing
- Intellectual
- Physical (Wheel Chair Bound)
- Autism

Spectrum of Disabilities visiting Science Centres
Challenges Experienced with Welcoming Groups with Disabilities

- **Lack of learning materials** for groups with disabilities
- **Untrained staff** to handle disable groups
- **Lack of suitable exhibits** able to accommodate groups
- **Difficulty in communicating with groups** e.g. Sign Language
- **Lack of funding** to customize programmes, equipment & exhibits
- **Finding organizations specializing in disabilities** to partner with
- **Catering for groups with a variety of disabilities** at a time
- **Insufficient staff available** to provide the close facilitation required
Are Science Centres Doing Enough to Serve the Disabled?

- Definitely Not: 45%
- Maybe: 36%
- Yes: 18%
- Definitely Yes: 0%
Hands-on STEM Workshop: Water Bottle Rocket
Videos...Tricks

the next step is to take a straw and blow some of the bubble

Amazing Science Experiments That You Can Do At Home Cool Science Experiments (Top 10)
Water Bottle Rockets: The Launch
Science Show: Chemistry
Recommendations

1. Partner with disability organizations for:
   - Staff Training
   - Review of programmes / activities
2. Host more regular activities for people with disabilities
3. Include disability schools in outreach programmes
4. Celebrate 03 December- INTERNATIONAL DAY OF PERSONS WITH DISABILITIES by the UN
5. Advertise the flexibility of your centres offerings to accommodate people with disabilities
6. Where possible try not to segregate learners- aim to create inclusive learning environments- social inclusion is as important as physical accommodation
In Conclusion...

Great Research & Science knows no boundaries...

Asperger’s Syndrome & Dyslexic

Epilepsy

Learning Disability

Amyotrophic Lateral Sclerosis
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