Global Research, Education and Innovation in Assistive Technology (GREAT) Summit

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Deaf Accessible AT

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Deaf Accessible Assistive Technology at NID Training, Care and Support Services provide innovative systems to persons with a diversity of hearing loss. This online, distance education IT-platform can provide effective Deaf friendly learning material, products and policy via sign language communication, to beneficiaries throughout South Africa. AT create a e-porthole and online service for Africa in the training of rural disadvantaged Deaf beneficiaries and critical and scarce skilled personnel.

NID research and Innovation Topics

1. Blended Learning:

Developing Deaf friendly learning material blended with a host of learning advantages that are made available through technology.

2. Virtual Interpreting hub:



3. SASL Dictionary:



4.Speech Visualiser:



5. Solar Ear Battery charger:



6. Aptitude skills test for Deaf school leavers.

7. Life Skills bridging program for School leavers.

Deaf Friendly Products, Provision, Personnel and Policy

To create Deaf accessible learning material for occupational/skills training and work placement in an African context.

A **Virtual, video** interpreting hub bridging and reducing training cost because of the huge distances between NID training and support units throughout SA. Providing a real time communication facilitation service with a Sign Language interpreter and voice between the user and a Deaf client.

The **SASL dictionary** is an online bilingual English/SASL dictionary to support the communication needs to all personnel and public services. SASL-SA Sign language.

The **speech visualizer** (assitive technology) enables the Deaf to practice their speech with a audio and visual feedback.

This **solar charger** is designed to charge rechargeable hearing aid batteries (size 13, 312, 675) for especially the rural communities in Africa with no electricity and no access in buying batteries.

The implications for the aptitude research is to provide a non **verbal aptitude/skills** test to support personnel and Deaf students to make the correct program choice for career training.

The importance of this Deaf friendly **bridging program** is to improve their life skills with communication, literacy and numeracy skills to prepare the Deaf students for accessible skills training and the world of work.

Implications for other aspects of the Global Research Agenda

The AT Systems and products developed and researched at NID are focused to deliver Deaf accessible policies and products in rural areas in Southern Africa. To better the critical and scarce skills of Deaf personnel and facilitators.

Deaf people who use SASL as a first language often find it challenging to communicate with post school lecturers and employers in the hearing work place.

The uniqueness of the AT-SASL dictionary is that it documents the variety of signs that exists in the **vocabulary of SASL** and lists the most-used sign first. Users are able to look at signs used in their area or are able to learn the sign that is most-used.



Figure: 97% Student placement: 2016

Strategies to share and build global capacity based on this work

All international AT researchers are welcome to contact NID and exchange their experience in Deaf education and **skills training** especially for school leavers who find it difficult to enter the post school system and the hearing workplace.

Contact point for global liaison

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