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



# WOODEN AT TECHNOLOGY TRANSFORMING LIVES

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The Ghana Rehabilitation team uses wood, a cheaper, durable and easily accessible local material to make standing frames, walkers, parallel bars and special seats. A standing frame cost \$70 compared to \$500-\$2000 in developed countries. Their purchase by a school have enabled the children to experience conductive education. Orthotists are being trained to manufacture. Research into bamboo a much cheaper and durable alternative is ongoing.

Your research, education or innovation snapshot

Children with disabilities in Ghana have little or no access to costly AT. Most AT are usually imported and are not customised to the individual's needs. Adapting designs from the internet, ATs such as standing frames, walkers, parallelbars and special seats were made.



What is the impact for AT users and other stakeholders?

A standing frame cost \$70 compared to models in developed countries costing \$500-\$2000. A 6-year old child with cerebral palsy who had never walked was able to after 2 months of use. These affordable devices have improved function and created independence as well as inclusive and conductive education

Implications for Products, Provision, Personnel or Policy?

#### **Products**

The products are durable and affordable, made out of wood which is an easily accessible local material and known to the orthorthist. This makes it appropriate for the low-income market.

### **Provision**

Consumers currently order and purchase the ATs directly from the workshop. A model school uses them to provide conductive education.

## Personnel

There are trained personnel who do proper prescription, fitting, user training and maintenance of the ATs.

### Policy

Advocacy for policy change to provide free ATs to PWDs and improve on training

Low cost, quality product Trained personnel

Potential for policy change

Inclusive and conductive education Implications for other aspects of the Global Research Agenda

This innovation addresses the Global Priority themes including:

- Reduced cost of AT
- High quality and affordability
- Source of employment and income for PWDs
- Research avenues in the field of bamboo use which has been proven to be comparable to duralumin.



Strategies to share and build global capacity based on this work

The KATH rehabilitation team welcomes collaboration and is willing to share:

- AT research ideas in wood and bamboo
- AT samples from local materials

Contact details for global liaison

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