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



Empowering personal autonomy through AT with Low Cost

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Do-it-Yourself and low cost applied to assistive technology (AT) is a trend that includes the search, design and creation of different objects that have been elaborated specifically for the particular needs of a person. Occupational therapist and users may work together to build a Low-cost-AT, contributing to empower the person in decision making and avoiding the possible abandonment of AT.

Applying DIY and Low Cost in AT

Designing and creating AT under the umbrella of Low-Cost, will improve and increase the access to devices, and reduce the lack of user involvement.

Applying outcome measures into complete process, allows to obtain evidence of that matching and to substantiate empirically a complete guidelines.



What is the impact for AT users and other stakeholders?

Users & Professionals & Skateholders work togheter to design the best solution

Priorities of User Design specific AT **Use Low-Cost Materials** Empowering user-make decision Facilitate acquisition of AT Reduce Abandonment of Improve provision system

Implications for Products, Provision, Personnel or Policy?

Products: Users and professionals work together to design and build an unique AT to meet specific needs of person.

Provision: Access to AT has to be universal and equalitarian for all. Design of particularity AT could be supported by public institution as Universities, and Non-profit organizations.

Personel: Occupational therapist are de developers of project, as they have the specific competences to assess and counselling about AT to promote personal autonomy in activities of daily living.

Policy: This project is developing by University of A Coruña, in collaboration with patients' organizations.

The process of creating **Low-Cost AT**

1. Design: Identifying/ Understanding

- 1.1 Needs detection:
- Identification of problem
- Understand the problem
- Determine goals
- 1.2 Proces of design:
- Synthesis: Problem / Priorities
- Initial Worksheet from MPT model
- Features for design
- Table of Synthesis

2. Develop of prototype: Creating

- Testing in real context
- Need for training
- Pertinent arranges
- System Usability Scale
- Assessment of Universal Design

3. Outcome Measures: **Implementing**

- Feedback
- -Resolution of Doubts
- Applying tools of outcome measures
- Matching Person & Technology

Strategies to share and build global capacity based on this work

Project is conducting by researchers by UDC. Diffusion includes:

- Development of guidelines for designing Low-cost AT.
- Document the AT created with specific worksheets
- Creation of network community
- Communications in international conferences

Implications for other aspects of the Global Research Agenda

- Improve access and provision system for AT
- Develop of guidelines for efficient procurement
- Determination of features of design of AT based on Low-Cost
- Determination of prescription, matching, training and follow-up as a continuum
- Contribute with Evidence-based **Practice**

Contact details for global liaison

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