

Proposal of a one day Tutorial/Workshop session ICABB-2010

(6 hours)

Title: Driving to Learn™ with a Responsive Partner: Practicing powered mobility using C300 - The Learning Tool™

Abstract

The intervention Driving to Learn™ in a powered wheelchair was developed for people with profound cognitive disabilities. An eight-phase learning process was identified together with strategies facilitating development and learning of powered mobility use. Also a special powered wheelchair – C300 - The learning Tool – was developed by Permobil Sweden to meet the needs of people with cognitive disabilities. The evidence base for the necessity of user-led intervention and tuition by a Responsive Partner for the user to reach achievements and De-plateauing was strengthened by the separate studies of Nilsson and Durkin. Their following co-operative work with modification and expansion of their solitary works focused on enhancing the tools for practitioners working at clinics, at day centers, in schools and so forth.

The intervention is useful for children and adults with complex disabilities and different levels of cognitive disabilities. In the Tutorial/Workshop the objectives are to present the ideas and provide participants the opportunity to test the assessment tool and C300 - The learning Tool practically.

Organizers:

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List of Topics

Using powered mobility for rehabilitation of people with cognitive disabilities.

The Driving to Learn™ intervention in a powered wheelchair.

Development of C300 - The Learning Tool™

Being a Responsive Partner in intervention.

Modification and expansion of an assessment tool for powered mobility use.

Illustrations of intervention using video-recordings

Assessing the phases of tool use skill

Choosing intervention strategies to facilitate learning.

Demonstration of C300 - The learning Tool™

Testing of C300 - The Learning Tool™.

Description, Motivation and Objectives*Description*

Nilsson (2007) and Durkin (2006) independently carried out PhD studies in the field of powered mobility use. The separate works of Nilsson and Durkin are both strongly connected

to a belief in the human potential irrespective of an individual's disability and in the evidence based knowledge of the importance of achieving independent mobility.

Insights from Nilsson's clinically based studies of powered mobility intervention led to the co-operation with the powered wheelchair manufacturer Permobil Sweden. The aim was to design a powered wheelchair appropriate for users with profound cognitive disabilities. After testing three prototypes and a pre-product in Sweden, now known as C300 - The Learning Tool™ a product in Permobil Europe's collection of powered wheelchairs, which can be purchased by Health Care units and Community services (Permobil AB, 2010). The most innovative feature of C300 - The learning tool, except for the specific electronic programming, is that it has a seating unit that is quick and easy to adjust for both children and adults.

In 2008 Nilsson and Durkin contacted each other and in the summer 2009 they met and worked for three intense weeks with the aim to bring together their previous independent knowledge. This work resulted in a modified and expanded assessment tool for powered mobility use together with practical strategies facilitating development/learning. The core of the approach is that the intervention should be user-led and the learning process should be facilitated by a responsive partner. The assessment tool, the facilitating strategies and C300 - The Learning Tool (the powered wheelchair) are the means for understanding the user's phase in the learning process, for choosing appropriate facilitating strategies, for setting up predictable equipment in order to stimulate development and learning of a multiple variation of skills as well as powered mobility use.

Motivation.

In rehabilitation of people with cognitive disabilities it is important to create opportunities for development and learning. Practicing powered mobility use in partnership provides

opportunities to experience mobility, agency, control, mastery and joy and enhances the user's knowledge of self, self-esteem, capability and well-being.

Objectives

The objectives of the tutorial/workshop are to provide the participants with both theory and praxis. We start with a theoretical part where we present our theories, the intervention, the assessment tool, the facilitating strategies, and C300 - The learning tool. Thereafter follows an interactive part where the participants are provided with the assessment tool to use it for assessment of video-recorded sessions of powered mobility use. C300 - The Learning Tool will be demonstrated and the participants also will have the opportunity to test the specific electronic programming.

Theoretical/Practical Innovations

The intervention Driving to Learn™. (Nilsson & Nyberg, 1998, 2003; Nilsson, 2004, 2007 and 2010).

The grounded theory of de-plateauing. (Nilsson, 2007).

The grounded theory of the responsive partner. (Durkin 2002, 2006 and 2009).

Modification and expansion of an Assessment tool for powered mobility use. (Durkin & Nilsson, 2010).

Driving to Learn™ with a Responsive Partner. (Durkin & Nilsson).

Development of a one-for-all powered wheelchair for children and adults with cognitive disabilities. Nilsson in co-operation (1994 – 2010) with Permobil Sweden and Permobil Europe. (Nilsson & Eklund, 2006, Permobil AB, 2010)

Implementation in the northern and the southern region of Sweden and at Chailey Heritage Clinical Services, United Kingdom.

References

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Permobil AB (2010). Driving to Learn™, C300 - The Learning Tool™. Leaflet accessible from www.permobil.com

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