**Rødevand, G. M., and Hellman, R (2011) 'Ung og begeistret: IKT-basert IADL-opplæring og trening for unge med utviklingshemning' [Young and Enthusiastic: ICT-Based IADL-Training] Down Syndrome Quarterly, 13 (1)**

## Abstract

In the R&D project 'Young and enthusiastic', conducted in 2008–2009, IADL (Instrumental Activities of Daily Living) skills relevant for mastering education and work situations were identified, based on a variety of information sources (e.g. literature studies, informant interviews and advice from an external expert group). We also investigated available ICT-based learning material and conducted a national survey of available ICT-based programmes in the relevant areas of IADL. Finally, a web-based study on IADL-related needs was conducted, along with a group interview with young people with cognitive impairments.

The web-based study revealed a set of major challenges for IADL learning and pointed to areas where there is a clear need for more IADL training. One of the most consistent findings is that young people with limited cognitive abilities are highly motivated to use PCs and mobile phones and that they manage to use ICT-based tools.

## Main findings

In the project 'Young and enthusiastic' (2008–2009), areas of IADL skills relevant for mastering education and work situations were identified. Young people with intellectual disabilities need to be trained in IADL skills to a much greater extent than others of the same age if they are to master activities of daily life and lead independent lives. According to guidelines from the Norwegian educational authorities, pupils receiving special education should have individual learning plans. For some, the learning targets could include basic skills in areas like self-care, communication, social roles and practical skills. Many IADL skills are important for mastering a broad range of school and work situations.

Young people are generally enthusiastic about ICT, and this proved to be the case also for those with cognitive impairments. The study investigated in which school- and work-related areas there was a need for training in IADL skills. We also explored what can be done on common technology platforms, such as PCs or mobiles, and then specified requirements for IADL training programmes on these platforms. The point of departure for the requirement specifications was how these platforms could be utilised to develop IADL skills in particular and create better learning conditions in general. Our findings indicate that the following areas within IADL are important for school and work for persons with cognitive impairments:

– time management;

– money/personal economy;

– transportation/mobility;

– advanced communication (managing contacts and how to reach them, using mobile phones, e-mail, etc.);

– media use;

– household activities (people with intellectual disabilities often perform such tasks in their work situation);

– mastering school and work situations;

- social behaviour (relations with others, socially acceptable behaviour, acceptable hygiene, etc.).

In the survey, we found very few programmes focusing on IADL and developed particularly for pupils with cognitive disabilities. Most of these programmes were at beginners' level. These programmes were often only available on CDs and had a much higher cost per pupil than online programmes.

Very often, programmes developed for mainstream education were not suitable for persons with intellectual disability. In most cases literacy was assumed. Moreover, the older the targeted students were, the more complex the language, with less use of motivating elements.

As a result of this study, we have produced requirement specifications for ICT-based programmes for IADL training. Digital learning aids that combine text, sound, images and video are relevant for this purpose. We are currently proceeding to develop software supporting IADL training for PCs and mobile phones. It is also important to develop guidelines for using the software, both for the pupils themselves and their teachers, parents and other family members, carers and work leaders.

**Web link for additional information**

Project presentation at the World Down Syndrome Congress, Dublin, August 2009, published in the 'Abstracts & Proceedings' book at www.wdsc2009.com/

The article in *Down Syndrome Quarterly* can be downloaded from the company website: http://www.karde.no/DSQ_Rodevand_etal_paper.pdf