Supporting the inclusion of learners with visual impairments using an app for text transcription via a cloud-system

The context for the use of ICT for Inclusion

In 2011 the Institut pour déficients visuels (IDV) launched a project aimed at finding a more flexible way of supporting our children in secondary school (inclusive setting).

These pupils depend on transcription services, provided by their local assistant teachers. Their teachers forward texts and books to the IDV's transcription service in order to generate a format that is accessible for their individual needs.

Since this procedure is slow and inflexible and does not favour learner autonomy, we developed a system that uses an ICT solution to meet their transcription needs.

We developed an iPad app that instantly transmits images of the blackboard (and any other kind of medium for texts) to the national transcription service. The interface is adapted for children who are blind or have visual impairments. The pictures of text sent are made accessible immediately (through optical character recognition and requested transcription) and saved on a cloud system developed by the IDV.

The digital version of the text requested by the student is available for download from the IDV cloud. The text can be easily accessed through the use of speech output, Braille displays or interfaces specially designed for children with visual impairments.

The printed version (Braille or large print) is sent by post or delivered by the assistant teacher.

Our partners in this project are the different secondary schools involved in the project. They welcome this ICT solution, as it means that the children attending mainstream classes in their school who are blind or have visual impairments will be able to do their homework, given that all the texts and supports needed are available at once. They will no longer be at a disadvantage in terms of accessibility to information and communication in these school settings.

Main challenges and obstacles

Key challenges include the ICT competences of secondary school teachers and peripatetic teachers. These could be overcome through staff training.

Additional information

www.idv.lu

http://www.idv.lu/index.php/fr/publications