

# Workshop on Advanced Learning Technologies for Disabled and Non-Disabled People (WALTD)

ICALT 2008: The 8th IEEE International Conference on Advanced Learning Technologies :  
Learning technologies in the Information society  
Santander, Cantabria, Spain, July 1st- July 5th, 2008  
<http://www.ask4research.info/icalt/2008/>



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## **Workshop chairs:**

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## **Workshop Description:**

Education should be considered a basic right. It is also vital for personal and social development, to give individuals opportunities and society a future. It should also be considered a right of every person to contribute to society to the maximum of their ability. Access to education, particularly further and higher education, increases the contribution people can make. However, many disabled people currently experience numerous barriers in accessing both education and employment and are in an enforced state of dependence, rather than being able to earn their own livings and contribute to society. It is therefore important to examine the barriers to increased participation by disabled people in education in order to determine ways to overcome them.

The focus of this workshop will be learning technologies and the associated underlying pedagogies. Computer based and multi-media learning technologies have become particularly important, but there are also very important lower level technologies such as textbooks and multi-purpose technologies such as laboratory equipment. Disabled people may require access to assistive technology, such as a screenreader, voice input software or an onscreen keyboard in addition to learning technology in order to obtain the full benefit from education. Although disabled people often experience serious barriers in accessing and getting the greatest benefits from education, there have been advances and there are examples of good practice.

In addition, questions arise concerning the accessibility and usability of learning technologies to disabled and non-disabled users. Accessibility is concerned with the environmental characteristics of the system input and output which either enable or prevent particular groups of users from using the system, whereas usability is the ability of the system to carry out the intended function(s) when used by particular groups of users. Other important issues relate to the cultural appropriateness of the learning content and the availability of learning technologies and the associated documentation in different languages. Related issues include the choice of icons, symbols or abbreviations to denote particular activities or carry out operations. There are also specific cultural and other issues relating to the provision of learning technologies, preferably in the appropriate national sign language for Deaf people.

Three main questions are addressed by the workshop were

1. What is the current state of the art regarding the development of Advanced Learning Technologies for Disabled and Non-Disabled People?
2. How are specific challenges related to accessibility and usability of content and presentation in advanced learning technologies currently being addressed
3. Should a design for all approach or design for specific groups of learners approach be taken in the future?
4. What are the key pedagogical and cultural issues in relation to designing and implementing learning technologies for disabled and non-disabled students?

### **Paper Submission:**

Authors are were invited to submit papers of up to 5 pages describing research related to WALTD for publication in the workshop proceedings edited by the workshop chairs. Authors could also submit two-page papers for review for inclusion in the IEEE conference proceedings of ICALT2008.

## **Work Participants:**

The workshop is not exclusive to, but is meant especially for the following categories of participants:

- Developers, students and educators interested in addressing accessibility and usability issues in the design of advanced learning technologies.
- Researchers who want to explore the pedagogical and cultural issues associated with addressing the needs of disabled and non-disabled students using learning technologies.
- Students and educators with minimal technical background interested in researching learning technologies as a key factor in giving disabled people opportunities for both personal development and economic independence

## **Workshop Organization:**

The workshop will last for 2 and ½ hours.

The workshop consisted of 3 sessions each based on one of the 3 main questions addressed by the workshop.

Each session consisted of 10 minute paper presentations followed by a 10 minute interactive discussion.

## **Contact Details:**

Please direct any questions on WALTD to

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