



#### Title of tutorial:

Assessing buildings, education methods and tools of the Technical and Economical University of Budapest (BME) based on the principles of universal design

Proposed lenght: 60 minutes

# **Abstract of the Proposal:**

In 2014 the Budapest Technical and Economical University of Budapest made a contract with the Universal Design Information and Research Centre in Budapest for the assessment of 5 existing buildings of the University with the method of the universal design.

The tutorial's aim is to identify the best practices of involvement of persons with disabilities in the design process. The tutorial is aimed at designers, engineers, rehabilitation engineers, projectmanagers, teachers and students.

The experience gained from the survey on the University with the involvement of experts with disabilities clearly shows that improvements proposed after the assessment will bring benefit not only to persons with disabilities but also to a wide range of potential users, including staff with different ages, students and adult and children guests of universities.

The tutorial shows the method on how a users' group composed of people with different kinds of disabilities could be involved in the assessment and what improvements were recommended to create equal opportunity for everybody, including disabled people taking part in the education system.

In the assessment disabled people themselves gave advise to engineers, developers and designers - with the leadership of a rehabilitation engineer who is disabled herself - on how their products should be developed to be usable also for disabled people and promote their independent living. Disabled people are able to properly decide on their requirements towards a building, a service, equipment or IT application. Disabled people taking part in the assessment are employees of the Universal Design Information and Research Centre or came from different advocacy organisations of disabled people.

#### Body of the proposal:

Good examples for activities in the field of universal design by the Universal Desing Information and Research Centre Hungary on the project with BME.

European accessibility standards and standards in Hungary are missing which could cover all the requirements for a design that satisfies every potential user's need in a





university education. In spite of it the fact that such an environment would create for all of its users much more liveable, simpler and useable conditions regardless of age, sex and abilities. Universal design (UD) is the method to build an environment for all users. The principles of UD were applied when the buildings and services of BME were examined.

In december 2014 the chancellor of BME asked the Universal Design Information and Research Center in Budapest to assess the accessibility of 5 ot its university buildings and make recommendations on improvements to make the environment for the university education usable for people with disabilities, children, elderly and mothers with little children.

The assessment would be the base of an interactive map of the route network of the university to be made, and in the long run proposals are to be given on the accessibility elements based on this.

Assessment of the physical and information communicational accessibility has been made on by taking into account the views of people with different types and degrees of disabilities. Users of 7 types of disabilities have been involved: people with mobility, visual, hearing impairments, people with intellectual and psychosocial impairments and people living with autism.

As a preparation for the assessment a questionnaire for the survey was made with the aspects of accessibility for people with all types of disabilities. In addition to it a continuous consultation has been held between the designer architect, rehabilitation engineer and the users' test group of disabled people. Findings on the site tour in the 5 buildings of the University were documented by photos.

At first step the test group of the Universal Design Center visited the different buildings of the university and made their observations either by filling the relevant parts of the questionnaire or by make their own remarks. The detailed study plan was made by a rehabilitation engineer, solutions for proposal with photos of good practices, compliance of acts, standards, users' points of view, and taking foreign good practices into account. The rehabilitation engineer and the test group worked together on it.

The access to education is important for everyone, and the universities are beginning to give examples on the approach of making their services accessible for all students, regardless of age, sex and abilities. The preliminary assessment based on the principles of universal design, made it clear, that multi-focused approach is needed.

It is essential to learn and apply the experiences of the users when barriers are removed or when making new investments based on the principles of universal design.

People with disabilities shall be involved in the design phase from the very beginning to reach that products and services are accessible to all. If we ignore to involve the





wide range of potential users, products and services will meet needs only a limited number of customers while others, will be excluded from the use of the products.

BME understood, that the needs of persons with disabilities can be articulated by themselves in the best way. Once you are making improvement in accessibility for persons with disabilities they need to be consulted directly. BME made contract with the Universal Design Information and Research Centre and with that entrusted disabled people to assess accessibility of its University buildings.

The proposal made within the framework of the assessment combines special needs of children, families and people with disabilities hopefully to everyone's satisfaction.

The Universal Design Information and Research Centre is looking forward to have requests for cooperation from companies, designers, project managers and rehabilitation engineers, who considers it to be important that their investments give answers for real costumer's needs, and who intend to make their investments accessible for all.

# Suggest presenters:

Speakers: Eva Hortobagyi and Erzsébet Földesi



Eva Hortobagyi is leader at ETIKK. Her scope of interests are accessibility for All with the involvement of persons with disabilities. She is an architect and rehabilitation engineer, giving advices in projects. She is hard of hearing, and her main area of work is built environment and accessibility for hard of hearing and deaf people.

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# Emphasis on appropriateness to present the tutorial:

The Day of Equal opportunities at the University BME

- topic: Introducing the activities of the Universal Design Information and Rehabilitation Center (ETIKK)
- presenter: Eva Hortobagyi
- 30 minutes
- 2013. february

ETIKK presentations for university students in the ETIKK office

- topic: showing UD tools for work and education in ETIKK
- presenter: Eva Hortobagyi
- 30 minutes
- 2013-2014

#### Organisers:

Éva Hortobágyi,





Professional leader, Universal Design Information and Research Center in Budapest, Hungary (www.etikk.hu)

Member of EDF E-mail expert group on Built Environment Board member, Organization of Hard of Hearing and Deaf People (SINOSZ)

# Erzsébet Földesi,

President of the Budapest Association of Persons with Physical Disability (operator of the Universal Design Information and Research Center)

President of Hungarian Council of National Federations of Persons with disabilities – umbrella organization of associations of persons with different disabilities Board member, European Disability Forum (EDF)