# A Sign Language Dictionary of Technical Terms

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# The TechWhiz project

- Three year Project
- 5 partners (Portugal, Greece, Slovenia, Germany, Cyprus)

### **Motivations**

- To overcome barriers to daily communication faced by deaf students
- Compromise the development of creative, emotional and social skills
- Constraining future opportunities and social inclusion

### Aims

- Promote equity and social inclusion
- Boost mobility of deaf students.

# Methodology

 VirtualSign translator of sign language

Transfer of research results to society

Add technical or scientific concepts in sign language

 Add 50 terms from specific domains (AI, Big Data etc.)  Portuguese, Slovenian, Greek, Cypriot, German

> Create translation models to EU languages

Create technical sign language dictionary for the new languages

 Train staff in partner institutions

# Sign languages characteristics

- Sign languages are distinct from oral languages
- Linguistic features are different
- The first language of deaf people is sign language
- Their country oral language is a second language, like English for most of us
- Despite being able to read in our native language we cannot read English without training
- The same happens to deaf people that cannot read Portuguese because their native language is Portuguese Sign Language, not Portuguese.

### Technical terms

Deaf people cannot understand technical terms:

- > there are no such words in their sign languages
- > there is no dictionary worldwide- for these terms

# **TechWhiz Objective**

To create an online semi-automatic platform and search a glossary providing explanations of technical or scientific terms in sign language

# **TechWhiz Components**

- the Dictionary i.e. an online glossary of technical terms explained in the sign language of the user
- the Gloss Loader which allows experts from the technical fields to upload explanations in spoken language and sign language experts to load the corresponding sign language gloss
- the Studio which is a tool allowing sign language experts to create and load new sign animations in a specific sign language.

# Methodology

 50 terms from specific domains (AI, Big Data etc.)

Create the Dictionary

5 sign languages

Add gloss for each term

 Portuguese, Slovenian, Greek, Cypriot, German

Create translation models to EU languages

Use Studio to configure the words

Train staff in partner institutions

## **TechWhiz**

Visit our website for more information

https://techwhiz.hmu.gr/

