

I-ACE Erasmus + Project

INTERNATIONAL ASSISTED COMMUNICATION FOR EDUCATION

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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



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.

Sign languages characteristics

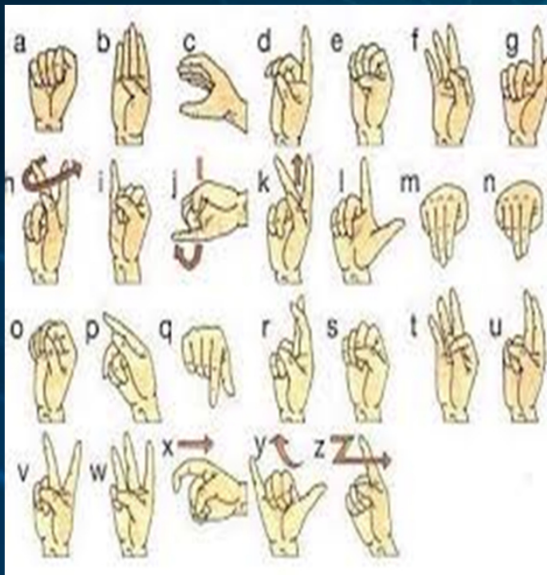
Components of sign languages:

- Hand configuration (hand shape, palm orientation)
- Point of articulation
- Hand movement
- Body movement
- Facial expression.

Sign languages characteristics

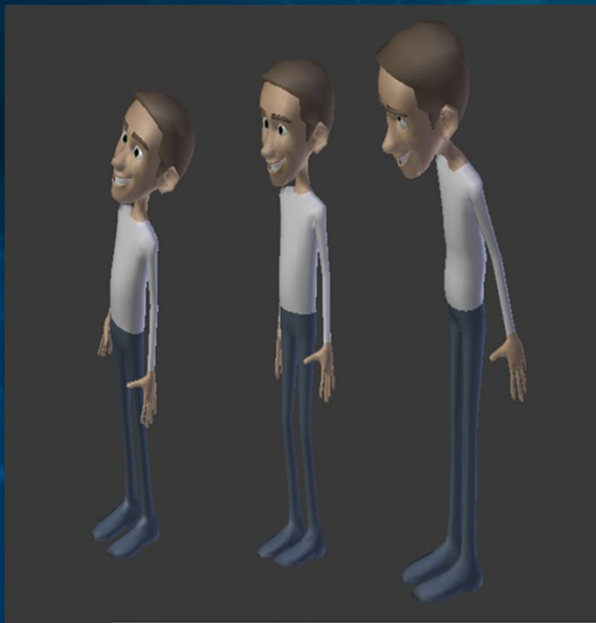
Hand shape

Palm orientation



Sign languages characteristics

Body Movement



Facial Expression



Sign languages characteristics

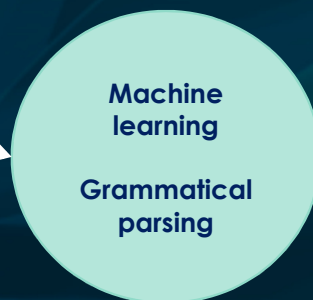


VirtualSign translator

Automatic bi-direcional translator between written Portuguese and Portuguese Sign Language.

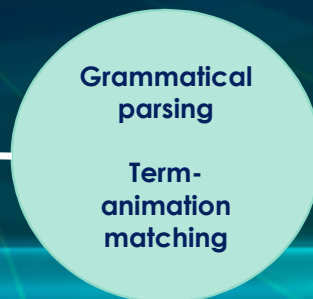


Kinect
5DT data gloves



Text

3D Avatar



Text

Incorporating new languages

In 2018

- Portuguese, Brazilian Portuguese (LIBRAS)
- Slovenian
- English
- **Greek**
- Cypriot
- German

Applications for education

PowerPoint add-on

Automatic text-to-sign translation app

Any digital content will be available in sign language.

Greek Contribution

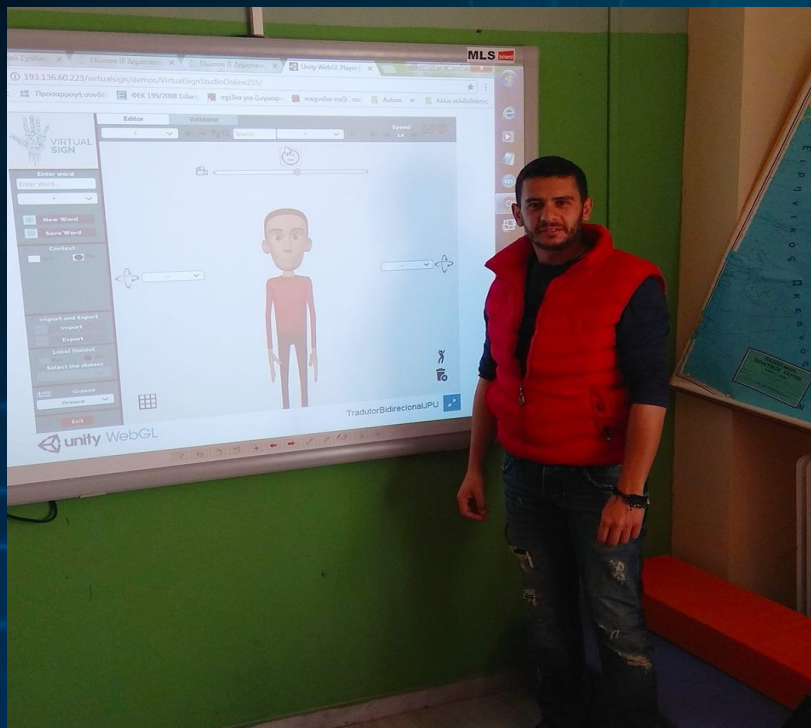
- ✓ Total Number of Inserted Words : 605
- ✓ Total Number of Validated Words : 605
- ✓ Greek model used as the basis for Cypriot model as well

Heraklion Focus Group

- ✓ Held in Heraklion on April 16-20,2018
- ✓ Pilot Installation to special primary school for deaf and hard of hearing children
- ✓ Training of the teachers of the schools on April 16-20,2018
- ✓ Teachers were validated and certified as trainers of the program
- ✓ Presentation of Mr. Kornarakis's Msc thesis titled "3D AVATAR AND I-ACE IN THE SERVICE OF THE DEAF PEOPLE"
- ✓ TV, Radio, newspapers and news websites highlighted the significance of the focus group

<http://bit.do/evjb8>

Heraklion Focus Group



Teachers Training



MSc Thesis Presentation

Heraklion Focus Group



Focus Group Participants



Focus Group

Demo

[VirtualSign Studio: term configuration](#)

[VirtualSign Studio: term validation](#)

[VirtualSign translator](#)



Thank you !