TechWhiz - A Sign Language Dictionary of Technical Terms for Education

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Abstract: Technical terms are an essential part of all technical and scientific documentation, whether directed to education, to research or to labour. However, there is the need to align terminology and communication channels to the abilities of the target audience, i.e. to ensure that equity and inclusion is provided. Deaf people cannot read fluently. Sign and spoken languages even in the same country use distinct channels, different phonology and morphology, different grammar and arise from different cultures. When we force deaf students to study via written spoken languages, we are putting them at a clear disadvantage and seriously compromising equity. Therefore, there is a need for a tool that can introduce and explain to deaf students technical or scientific concepts from specific areas of knowledge in sign language. TechWhiz is a three years European funded project comprising of six partners coming from five countries, that aims to fullfill this gap. The TechWhiz project aims to assist deaf students to gain access to education in their first language thus enhancing their learning experience. To address this goal an online semi-automatic platform was developed to create and search a glossary providing explanations of technical or scientific terms in sign language. The online semi-automatic platform consists of three componets, namely 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 and the Studio which is a tool allowing sign language experts to create and load new sign animations in a specific sign language.