

# Quality Training in Real Time Subtitling across EU and EU Languages

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## Abstract

The need for real-time subtitles has risen since the adoption of the Convention on the Rights of Persons with Disabilities by the European Accessibility Act and the Audiovisual Media Service Directive. Both urge providers to ensure access to people with a visual or hearing disability. The provision across Europe is uneven and its quality uncontrolled (European Federation of Hard of Hearing People, 2015) or insufficient (Romero Fresco, 2015). Nowadays, many subtitlers still lack specialised training, and their professional status is not clear or recognised (ACT, 2015).

LiveTextAccess (LTA) is a project that approaches the mismatch between trained and needed skills in the labour market through a collaboration between educational and non-educational partners. Subtitlers trained by LTA will have suitable skills to provide high-quality subtitles by respeaking or velotyping in different contexts: cultural events, parliamentary assemblies, broadcasts, education, and at the workplace, as well as for three working settings: face-to-face, online and by relay.

LTA opens job opportunities for people with and without disabilities. The harmonised professional profiles and competence descriptions, and the ready-to-use open source materials will allow for easy implementation at universities

and companies. Further, LTA will open a training pathway outside the universities for current professionals willing to develop new skills through vocational training.

## 1 Introduction

Real time subtitles can be produced in three ways: by stenotype, respeaking or Velotype. Stenotyping is reliable and accurate but it is language specific, and only exists in very few European languages. The training takes long and the service is expensive.

The second one, respeaking, implies using a speech recognition software to transfer voice to text. Respeaking is the less expensive option and the most used one nowadays. However, end-users criticize the uneven quality delivered (Romero Fresco, 2015). The number of available languages is limited, and the training focuses on the experience of the trainers.

The third one is Velotype, an EU developed system between the previous two in terms of quality, delay and cost. The Velotype keyboard produces whole syllables or words with every keystroke. Trained subtitlers can type at the speed of speech for longer periods. It covers over 30 languages, and has shown to deliver superior results in noisy environments and when it comes to high quality orthographic typing.

LTA focuses on respeaking and Velotype, since they cover the greater number of languages and working scenarios, respond to the market demands and thus shows a higher employability potential.

## 2 Objectives

Many EU research projects have been funded on media accessibility (e.g. DTV4ALL, ACCESSIBLE, ADLAB, HBB4ALL, SUMAT, SAVAS). However, to our knowledge, the professional nor the recognition aspect involved in media accessibility has not yet been covered in any EU funded projects<sup>1</sup>. LTA fills this gap. Media accessibility is gaining momentum, and it is high time to think and organise a new curriculum and define a new quality professional profiles who can be deployed in different media, social and cultural contexts.

LTA aims are:

- Increase employability by creating certified qualifications that will train professionals on the existing needed skills. The prospective trainees are: translation and interpreting graduates and postgraduates, professionals already working as translators or interpreters, real time subtitlers or other professionals who want to expand their skills, and become Intralingual Respeakers and/or Velotypists. The certified trainings will be available for both academic and vocational levels: ECTS/ECVETS. The flexible and modular design will allow to implement the courses in different institutions, be it at Universities, as professional courses, or as in-house trainings.
- Promote an Information for all approach (Greco, 2016). LTA aims to benefit a wider target group of real time subtitles viewers. This includes vulnerable audiences (deaf and hard of hearing viewers, physically challenged groups, people with special needs and learning disabilities) but also foreign audiences. In this regard, migrants, refugees and marginalized groups will acutely benefit from subtitles that allow them to improve their language skills, thus facilitating their integration in the new culture.
- Create flexible Open Educational Resources (OER) that can be integrated in different learning environments and catered to the needs of various trainees' profiles, also blind and low sighted trainees. This open access digital approach supports the modernization of training systems and produces flexible materials that can be re-purposed in different

learning situations. LTA adopts a strategic and integrated use of ICTs and OER in training putting the trainee at the centre of the learning process by generating content that can be used for self-learning, in flipped learning environments and in class.

- Conduct user centred evaluation with prospective trainers and trainees to secure the quality of the resources and the trained skills, and the certification.

The wide scope of LTA can only be reached through transnational cooperation and networking of diverse EU realities. The LTA consortium will assure that EU linguistic and cultural diversity is taken into account in the curriculum and material. The LTA consortium includes three HEIs (SDI München University of Applied Languages, Universidad Autònoma de Barcelona and Scuola Superiore per Mediatori Linguistici of Pisa) working at the cutting edge of media accessibility training and research, one European certification partner (ECQA) to secure academic and vocational levels, one end-users association (EFHOH) and three non-educational partners (SUBTL, ZDF Digital and Velotype) to ensure that the profile meets multiple market and end-user needs.

The complementary mix of educational and non-educational partners will assure exchange of expertise coming from different sectors (academia/industry/end-users) and operating in countries with different local or national subtitling traditions. A bottom-up cross-sectorial collaboration will be used to define the curriculum and the necessary digital technology, to outline existing and emerging solutions, possible innovation, not only for training but also for the deployment of real time subtitling.

## 3 Implementation

LTA will achieve its aims by applying a user-centric methodology and leaning on the certification process of the European Certification Agency ECQA, which is an LTA partner. In a first stage, LTA will create skills card for the new professional profiles. Then, the identified competences will be categorised and described as learning outcomes. This first stage

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<sup>1</sup> At the EU eACCESS+ web, [www.eaccessplus.eu/education\\_survey](http://www.eaccessplus.eu/education_survey), not a single education or training programme could be found.

will also include collecting best practices in training.

The design of a modular course will follow. A modular design will allow institutions to adapt the implementation to their own needs. The creation of training materials as Open Educational Resources will be the next step. The quality of the educational resources will be tested and evaluated by prospective students and trainers. The output of this stage will be a repository of assessment methods.

At the last stage of the project, LTA will harmonise the new profiles (LTA Respeaker and LTA Velotypist) and will attribute corresponding credits for both academic and vocational levels of the training: ECTS/ECTVES. These steps will ensure transferability, will set standards across Europe and will enhance the sustainability of the results beyond the completion of the project. Trainees will see their knowledge, skills, competences and qualifications quickly and easily recognised.

#### **4 Impact**

The training material created by LTA will be open source. The modular design will allow institutions to use the modules all together as a comprehensive course, or separately in different constellations, and catered to trainees' needs as for blind and low sighted students. The materials will secure that future trained subtitlers have the necessary broad range of knowledge, skills and expertise required by an ever-changing market scenario.

Regarding transferability, the outputs delivered by LTA will help other institutions to develop similar training for other arising profiles as that of the easy-to-read professional; also appealing for blind and low-sighted students. The described methods for teaching transferable skills can be easily implemented or developed in other fields. The modular structure linked to learning outcomes and ECTS/ECTVES will maximise the flexibility for transferring the training scheme.

To sum up, LTA training will create added value in three ways: (1) enabling anyone to access and be trained via this material, regardless of their professional or academic background; (2) offering its deliverables worldwide thus allowing EU's know-how, access concepts and guidelines to be

disseminated effortlessly across the globe; and (3) securing resilience, since the online material will have validity for many years.

#### **References**

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