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**Social inclusion, a challenge for Europe:  
Accessible language Learning and job opportunities  
The case of visually impaired persons**

**Antonio Quatraro**

UICI Firenze  
Italy

[a.quatraro@alice.it](mailto:a.quatraro@alice.it)

**Mario Paiano**

Centro Machiavelli Firenze  
Italy

[mario@centromachiavelli.it](mailto:mario@centromachiavelli.it)

*This paper summarizes efforts deployed by MoLLVIS consortium to improve accessibility for language learning of Visually Impaired people (VI) and to promote their social inclusion. The consortium consists of special schools for VI, common language schools, ICT experts. This model of networking could serve as a good example of integration of experiences and of know-how.*

*Based on the results of the ELLVIS and VET4VIP projects, MoLLVIS aims to provide a German course for VI available on apps for Windows, Apple, Android mobile devices and on Windows desktop version.*

*Visual impairment has an impact on all development areas of the individual, indeed, World Health Organization classifies blindness as the heaviest invalidating disease. 80% of our knowledge are based on visual information. Our environment is full of sensory stimuli and sighted people use only part of these, others are used only in specific circumstances (i.e. dark rooms), or by VI people.*

*Why language learning?*

*Language, vision of life and behaviours are in a mutual relationship and can help us to better communicate and to better understand differences. Language and terminology are the echo of thoughts. Clear language generates clear ideas and clear ideas create coherent behaviours. Word is a substitute of visual information (explanations, audio description, captions) more than tactile images. The word has greater importance for VI, because turns to be the main communication means.*



*Body language, movie, images have to be translated into spoken or written words, in order to be grasped also by VI. Therefore, learning a foreign language is helpful especially for VI people. So, for VI people language is a bridge towards communication and social inclusion.*

*Also, while in the past VI used similar training materials being in special schools, now mainstream publishers don't take into account VI when developing materials. Our consortium aims to close the gap by producing accessible materials for VI people, in inclusive didactic settings.*

*We live in the Information society and we are experimenting a fast evolution of technology. What was a wall/a limit 20 years ago is now a border (i.e. scanner and OCR for VI people). The introduction of ICT-based synthetic voice is a breakthrough for VI, opening new perspectives for employment opportunities as well as for leisure (reading, travelling, etc.). Nevertheless, too often technology doesn't consider accessibility and increases digital divide.*

*Current economic trend shows that German economy is growing, and German tourists are world-wide leaders in travelling abroad. Consequently, job opportunities based on verbal communication are central in view of social integration of VI in Europe. In this context mobile devices are attractive for younger people, offer accessibility features for VI people and are becoming the standard lifestyle, business, training and communication gadget of our target groups. As the user-interface is designed to be also attractive to sighted learners, the impact goes beyond the VI students and will reach a wide audience.*



## 1. Introduction

*MOLLVIS - Mobile Language Learning for Visually Impaired Students* is a project funded by the European Commission through its Lifelong Learning Programme, KA2 Languages action.

The project is carried out by UICI, Italian Union of Blind Firenze (Applicant) and Centro Machiavelli Firenze (Coordinator), a school founded in 1978 which provides linguistic and cultural tools to learn languages and creates opportunity for exchanges, in co-operation with a network of European partners (TANDEM HAMBURG, GedonSoft GmbH, Bildungszentrum für Blinde u Sehbehinderte – Germany, Asociatia Nevazatorilor Brásov and Centrul Cultural German Brásov – Romania, The Moray House of Education University of Edinburgh, Bartiméus Onderwijs, Corporate Quilt B.V., Netherlands).

Based on the outcomes from previous European projects ELLVIS and VET4VIP, that created computer-based language courses for visually impaired (VI) learners, the project MoLLVIS aims at creating German language learning apps for Windows, Apple and Android devices

MOLLVIS started in January 2014, will end on 31<sup>st</sup> March 2016 we expect that the outputs will have an important impact on the social inclusion of VI people but will also be exploitable by sighted users.

For a VI person language learning is the main road towards effective communication, social inclusion and job opportunity and mobile devices like smartphones and tablets computers can offer new ways of language learning to support their social integration.

One of the added value of MOLLVIS, is that the project results are open and exploitable also by sighted users who are willing to learn the German language.

How is this possible? Simply because the transfer of the computer-based language courses to new technological devices, such as smartphones and tablet computers, makes educational tools and materials which have been created usable by a more wider number of users.

The MOLLVIS app, indeed, has been designed with an attractive user-interface that will allow both VI and sighted to benefit from the project output.

Mobile devices, especially smart phones and tablets, are on the verge of becoming the standard lifestyle, business, training and communication gadget.

Language learning should adapt and could more and more profit from the opportunities this technology offers. Considering the wide application of the new technologies, we therefore expect that this flexible teaching system will have a considerable impact.



## 2. Environment, technology and visual impairment

Visual impairment has an impact on all development areas of the individual affecting every sphere of the human life and the related activities, both as an individual and as member of a community, including mobility, communication, human relationship, environment control, abilities, job opportunities, relationships.

Although we give for granted that reality is independent from our perceptions (e.g. a sunny day, thunder sound, etc.), what we call "reality" depends on some "mental spectacles" through which we perceive what is around us.

When we need to define a person lacking of something, the observation point we adopt makes the difference. We can use two starting points: a= starting from what is missing (deficit) - the classical perspective; b= starting from what is functioning (ICF, International Classification of Functions perspective). The **ICF**, published by World Health Organization in 2001, is focused on clinical perspective but it can be applied also to social/pedagogical domain, with due adjustments. In ICF, deficit is the lack of something present in an average member of a given population; handicap is the result of a specific relationship between an individual and his/her environment.

Therefore, given the importance of the relationship between the human beings and the surrounding environment, nowadays we cannot escape from considering the link between environment and technology and from how such a connection affects people's life: we live in the Information society. Nevertheless, accessibility and usability are far from being duly considered and too often technology, far from promoting inclusion, turns to increase digital divide.

## 3. Our projects

Why language learning? Word is often the most efficient substitute for visual information (explanations, audio description, captions), more sustainable in comparison with tactile images. The majority of VI persons cannot access to written information directly (Braille/large print), in a comfortable and efficient way.

Since the beginning of our work we tried to share our experiences through full immersion stages involving the whole consortium, focused on single problems, as parts of the main problem concerning how to develop effective tools capable of offering VI persons the possibility to learn a foreign language (English and German), considering their potentialities as well as most common restriction depending on personal history, degree and type of visual impairment.



International mobility is predictably growing very fast, language opens minds and better communication skills improves job opportunities: this is true for everybody, but especially for VI persons, who have less job opportunities than their sighted peers.

While in past times all VI persons used more or less the same training material, being in special schools, nowadays, due to introduction of inclusive didactic settings, there is a need for effective training materials and resources as long as for effective training opportunities not too far away from one's living place.

Unfortunately, mainstream publishers do not take students who are blind and VI into account when developing teaching materials. Since paper-based text books are not accessible, computer-based teaching material and apps able to run on new technological devices, specifically designed for students with VI, provides real chances to learn a foreign language.

#### **4. Aims**

The main project's aim is to reduce the existing gap in language education by producing accessible material for language learning for VI persons, in inclusive didactic settings.

The consortium's idea has been since the beginning the one of practising integration as a work methodology: we thought that used process of building and realizing our projects could be the first opportunity to adopt the integration model as our working methodology.

Based on the results of the previous projects ELLVIS and VET4VIP, MOLLVIS provides a German course that meets the needs of VI learners focused on spoken German, available through Windows, Apple and Android based platforms.

The current economic trend shows the German economy is in a growing phase, and German tourists are still world-wide leaders in travelling abroad. Consequently, job opportunities in all fields based on verbal communication are a crucial factor in view of implementing social integration and job opportunities for people with VI in Europe.

Mastering a foreign language, thus becomes a sort of "bridge" through which the visual impaired person can have access to different cultures and to different opportunities in the domain of social and working contacts.



## 5. Methodology

The Consortium has been specifically built with the aim of provide a good example of integration\_of experiences, competences, and know-how. Consisting of users' associations, special schools for the blind and common language schools, the MOLLVIS partnership is itself representative of the inclusive methodology that the project wants to foster and implement.

Thanks to the contacts and links to other bodies and associations provided by each partner, our product will be used both by special institutions and by common language schools. However, also the possibility given to the self-learners of draw benefit from the project outputs, through distance assistance, deserves to be underlined.

The new technologies are often criticized for their sometimes negative effects on the social aspects of human beings. MOLLVIS decided to reverse this point of view using mobile devices like smartphones and tablet computers as new ways able to facilitate the language learning. These devices are attractive to younger people and can offer accessibility features for people with VI; too often however the existing language learning apps are not accessible to learners with visual impairment. Also in this case MOLLVIS is filling in gaps: on one hand tries to reduce distance between VI and sighted people by providing them with a tool that both can use, and on the other hand creates an app able to use the potential that these devices offer, not often properly exploited.

## 6. Activities

At present, all the partners are carrying out one of the most important stage of the project's life: the testing and evaluation of the MOLLVIS apps.

Each involved partner is in charge of organizing and implement a pilot German course for beginners. The participants had to be chosen among both VI learners and sighted one. The pilot courses are essential for the testing of the developed language course as well as for the testing of the app itself.

The pilot courses are totally in line with the project's inner soul as they are both expression of the inclusive methodology that MOLLVIS wants to foster and a great example and opportunity of social inclusion for the VI learners.

The sighted students, on their side, will be offered with a special opportunity of social and personal growth, having the chance to get in touch with VI peers and understand their different but sometimes more comprehensive and sensorial vision of the world.

Besides the pilot courses, each project's partner will also carry out a Teacher Workshop of testing and evaluation of the MOLLVIS course and methodology. The involved teachers, both for sighted and for VI learners, have the task to



discuss the German course' contents and features with the aim of verify the effectiveness from the educational point of view.

Thus this stage of the project is essential as it will provide precious data that will be discussed and shared among partners so to effectively exploit them with the final aim to validate all the tested project' outputs: the app and the language course.

MOLLVIS will hopefully represent on more step towards inclusion and language learning for all.

## 7. References

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