10.2478/ewcp-2023-0018

Teaching Visually Impaired Translators and Interpreters in Romania: Available Tools and Inclusive Teaching Methods

ALEXANDRA MOLDOVAN
Lucian Blaga University of Sibiu, Romania

Abstract
This article explores the teaching methods used in university classes of Translation and Interpreting with visually impaired students. It is the first essay on this topic applied to the context of Romania. Therefore, it offers basic suggestions of implementing international teaching methods for visually impaired students in Translation and Interpreting in Romanian universities, while also raising awareness about the challenges they face. The literature review is divided into two categories: digital skills and professional skills. In presenting the most essential digital skills a visually impaired translator and interpreter must acquire, the article makes reference to Kornacki's model which groups technologies according to the necessary skills. The professional skills are discussed in three articles from two different universities, namely the University of Trieste in Italy and the University of Mainz/Germersheim in Germany. The German study described in two articles – one in German and its shorter version in English – gives a detailed perspective on the topic, being the core of the theoretical ideas mentioned in this article. The knowledge acquired by reading this article will most certainly lead Romanian professors to using the optimal approach when teaching emerging visually impaired translators and interpreters. The teaching methods can be put into practice if the right equipment is available and accessibility is implemented in all aspects regarding translation and interpreting.

Keywords: translation, interpreting, accessibility, assistive technology, digital skills, professional skills, superior education, professors, mixed groups, inclusion

According to Romanian television advertisements, any person with disabilities has the right to be included in mainstream schools. In spite of this right stated in Article 16(2) of Law 448/2006, countless challenges are encountered by people with disabilities in mainstream education. For instance, teachers often lack the skills for teaching visually impaired students and there is little guidance in Romania on this issue. In this context, translation and interpreting are careers rarely embraced by visually impaired university graduates. Although not specific to Romania, these challenges are more strongly felt here, in Eastern Europe, than in Italy, Germany and Poland, where the disability rights movement has resulted in a lot of research on the topic of visual impairment. Little of this, including the articles written by the Polish professor Wojciech Figiel, the Italian professors Cynthia Jane and Kellett Bidoli, the German professor Susanne Hagemann and her team, as well as other European and Asian scholars, refer to translators and interpreters with this condition. Two universities paid special attention to the teaching of visually impaired students in Translation and Interpreting: the University of Trieste in Italy and the University of Mainz/Germersheim in Germany. Three essays resulted from these studies: two in English and one in German, the comprehensive nature of the latter being synthesized in its corresponding English essays and given a fresh perspective. These academic articles pave the way for a more inclusive international classroom environment for visually impaired students who wish to pursue these careers. They are particularly useful in the rare cases where a visually impaired person chooses to apply to a university in Romania. When faced with this kind of situation, professors are either skeptical about the performance of the students, who feel stigmatized, or their curiosity and willingness to help the students

turn into disappointment because of general ignorance or lack of specific skills related to the teaching of the visually impaired. Therefore, this article will explore the different approaches to teaching when having a visually impaired student in a class of translation or interpreting by reviewing recent international research on this field and applying it to the context of Romania.

Although there is no data concerning American translators and interpreters with visual impairment, carefully-drafted documents such as the Disability Inclusion Training Manual of Project COMPASS (Newell 2017) offer basic teaching tips that could also be applied to visually impaired university students. Detailed reading of these documents could eliminate the skepticism of the professor, who should consider visual impairment as a physical, not mental disability. In other words, if the necessary equipment and conditions are provided, visually impaired persons may equal or even surpass their sighted peers in performance. These students often voice their requirements. Therefore, communication is crucial for a fruitful collaboration. However, the material points to some aspects that might not be mentioned by the individual with visual impairment but may give them the confidence they need in a learning environment. According to Helen L. Newell, professors should choose classrooms with balanced lighting for an optimal performance of the visually impaired. They should also make a description of the classroom, especially of the location of furniture and encourage the student to move freely (25-26). There is also a difference regarding the level of vision: student with low vision need to have large print, recordings of materials, magnifiers, verbal instructions etc. (25), whilst blind students need identification by name until the person memorizes the voice, as much assistance as the person needs, Braille or recorded resources, clear verbal cues related to visual aspects, using vocabulary related to sight etc. (26). Nowadays, most of the visually impaired persons' needs are fulfilled by the use of a computer equipped with a screen reader and a Braille display, which allows them to perceive the mainstream materials in a verbal and tactile way. However, the accessibility of digital materials

seems to remain a challenge for the students. Professors need, therefore, to ensure that visually impaired students can view the content of the files given to them and that they are included in the digital classroom. This can be achieved by getting themselves acquainted with the Web Content Accessibility Guidelines (WCAG 2.1) developed by the World Wide Web Consortium (W3C).

These W3C guidelines underline that there are four accessibility principles a person must comply with in order for the software/website to be considered accessible: one must be perceivable, operable, understandable and robust. The first criterion is perceivability. Its relevance can be noticed, for instance, in source documents that might have graphical elements. These can be assigned alternative texts. Furthermore, videos could also be audio-described. The second principle is operability, which regards the way the user interacts with the device. Thus, to be accessible, a software/website must have full keyboard access as an alternative to mouse operability. For example, professors should choose to work with the visually impaired in computer-assisted (CAT) tools with comprehensive keyboard support. Furthermore, labeling elements is another accessibility requirement that is relevant to a visually impaired user. For example, offering a textual name for a button in a PDF form. Understandability represents the third principle, which does not include features specific to visually impaired users. However, the last principle, namely robustness implies that the content can be interpreted by assistive technologies, including screen readers (World Wide Web Consortium 2023). Understanding these elements could help professors make their lessons accessible and inclusive. The general perception that visual impairment is associated with mental problems is an impediment in this respect. Thus, professors consider that they should adapt the courses so that they have a reduced difficulty.

The misconception that visual impairment also involves mental problems is the cause that leads Romanian visually impaired students in general and in Translation and Interpreting in particular to give up university, while in other countries, they are treated equally as their sighted peers, according to the studies of Cynthia J.

Kellett Bidoli (2003), Zeliha Bülbül et al. (2015) and Susanne Hagemann (2016). These scholars describe the teaching methods adapted in their universities for mixed groups of blind and sighted students in Translation and Interpreting, considering the opinions of all the persons involved: students, professors, educational theorists and visually impaired translators and interpreters. These articles, together with other contributions in this field written by Raden Arief Nugroho et al. (2016), Iman Magdy Refaat (2021) and other scholars, offer a rich perspective on the most suitable teaching tools and methods for disciplines related to translation and interpreting. This article organizes tools based on Michał Kornacki's model regarding digital skills, while the teaching methods are discussed in relation to the opinions of each category of interviewees presented in Hagemann's study. These are then applied to the situation in Romania and associated with clear solutions that could be implemented in the Romanian educational system to facilitate inclusion of people with visual impairments in universities.

Visual impairment involves little or no vision. Therefore, the tools designed for visually impaired persons primarily use other senses such as touch and hearing. Furthermore, the translation and interpreting professions require certain digital skills, and it is in translation classrooms that visually impaired students acquire them. As professors generally train sighted students in Translation and Interpreting how to use the available tools, they should also pay attention to the visually impaired students and thus get acquainted with the most accessible hardware and software technologies available. Kornacki's model of digital skills required in translation should, therefore, also be adapted to the situation of interpreters, who use fewer tools. Ultimately, the information will be applied in the context of assistive technologies available to the visually impaired.

A first category of digital skills relevant to the field of translation and interpreting contains hardware technologies, namely "rudimentary computer handling" and "advanced computer tools" (Kornacki 44). Under the category of "rudimentary computer handling," Kornacki lists storage devices, Internet connection etc.,

which are normally used by professors in their classrooms. Additional blindness-specific skills include touch-typing, meaning the ability to recognize keys, explained in Yahia Barkhordar and Dr. Kazem Yousefi's article entitled "Major Skills and Abilities of Blind and Visually Impaired Translators" (2015). This can be acquired through talking typing tutors or screen-reader-integrated features. The ability to listen to synthetic speech "at around three times the speech speed than standard," as mentioned by Tohru Ifukube (2017), can also be considered to belong to this category. More advanced hardware devices include the consoles used in simultaneous interpreting, which, according to the article of the anonymous interpreter in the "Chartered Institute of Linguists" called "Interpreting without Sight," now have beeping capabilities, so that visually impaired interpreters know when they change the channels and can stop at a certain channel by counting the beeps. Professors should only make sure to explain which is the appropriate channel. Braille displays and notetakers (or tablets, as suggested by the anonymous interpreter) may also be placed within the category of more advanced hardware tools which have software components and require hardware skills such as Braille reading abilities. The difference between these Braille devices is that a refreshable Braille display automatically translates into Braille the letters shown on the screen using electromechanical operating principles, while a notetaker provides additional enhancements such as its own operating system with standalone applications, the term "Braille tablet" used by the anonymous interpreter mentioned above being most appropriate for this device. The use of keyboard shortcuts, of high-speed synthetic speech and of the Braille technologies ensure a fast translation process. The operating principle of all devices mentioned above for the visually impaired users is implicitly linked to software additions called assistive programs that accommodate their needs.

Complementing Kornacki's model, screen readers are certainly the most important software components visually impaired translators and interpreters need, since they enable them to use the other programs on a computer, phone or smart device.

They are based on both senses – touch and hearing. The paramount necessity of gaining screen reader skills lies in the fact that such a feature empowers visually impaired people to use devices by means of vocal output of the screen reader and a refreshable Braille display or notetaker, a Braille reading and writing device with or without note-taking capabilities, connected to the mainstream devices through USB or Bluetooth. The shareware screen reader called Job Access with Speech (JAWS) by Freedom Scientific is more appropriate for professional contexts than other Windows counterparts such as the incorporated Narrator or the open-source Non-Visual Desktop Access (NVDA), their functionality being enhanced by scripts and add-ons, respectively. On other operating systems, the screen reading technologies are either incorporated or freeware, as is the case with VoiceOver for Apple products, TalkBack for Android and Orca for Linux. Windows, with its richness of customizability options, as well as its popularity among sighted translators and interpreters and their collaborators, is the most commonly-used platform for translation tasks among visually impaired language professionals as well. The above-mentioned assistive technology is the key to making this operating system accessible for them, so that they can use all the technologies that boost their productivity.

Kornacki's next category of software skills refers to text formatting. The visual process of preserving the formatting is an essential part of the translation result. Although screen readers have font and attributes description capabilities (such as the JAWS proofreading scheme which indicates text attributes with different voice pitches), this process is time-consuming, as stated by the Austrian translator Daniela Dold. These skills usually mean operating Optical Character Recognition (OCR) technologies. Sighted translators face the same problems in CAT tools, as they need accessible texts. Professors should provide accessible materials from scratch since visually impaired persons are not able to identify the original layout of the text which might be poorly converted because of the blurry image. Nevertheless, professors should encourage students to operate these technologies since they

will encounter inaccessible texts in real life. Hagemann states that her blind interviewees, including professional translators, have different attitudes towards inaccessible materials: some students or translators expect the professors/clients to offer them accessible materials or to make them accessible, others pay for sighted assistance, others do the conversion on their own and the last category does not accept such work (84).

CAT tools represent a further category mentioned by Kornacki. Since all visually impaired translators pointed out the lack of accessibility features in CAT tools, including the industry-leading Trados Studio, some of them have written guides on which CAT tools are accessible and how to use them to increase productivity. The accessibility reviews and guides drafted by Dold on Fluency by Western Standard, MateCat and MemoQ –, the anonymous guides uploaded by Claire Amoroso on Theroundtable mailing list for visually impaired translators and interpreters regarding the use of Fluency (Conway n. d.) and empirical evidence involving OmegaT reveal that Fluency is the most accessible CAT tool. Its developer included text-to-speech options, screen reader support and speech-to-text functionality, along with a comprehensive list of keyboard shortcuts. Silvia Rodríguez Vázquez and Fiorenza Mileto, in their article entitled "On the Lookout for Accessible Translation Aids: Current Scenario and New Horizons for Blind Translation Students and Professionals" (2016), brought further insights, demonstrating by means of a survey that CAT tools are not preferred among the visually impaired community due to the developers' irresponsiveness to accessibility issues (132), although they can dramatically reduce the challenges arising from target text formatting according to the original. Rodríguez Vázquez Dónal Fitzpatrick, and Sharon O'Brien studied the accessibility of web-based CAT tools and found that they lack many accessibility features that could enable visually impaired translators to work with them independently. Visually impaired translators shift, therefore, their attention to Word processors and different studies, such as those made by Barkhordar and Yousefi, Kellett Bidoli, Nugroho et al. and

Valentina Widya Suryaningtyas, focus on the translation techniques and strategies and not on the translation environment. Meanwhile, Hagemann, Figiel, Tara Owton, Refaat and Rodríguez Vázquez with their co-authors analyze the accessibility of CAT tools, their main goal being to raise awareness on the need for change in CAT tool accessibility for better productivity.

The chart presented by Kornacki further lists digital skills used during research and for communication with the client, such as employing search engines to find dictionaries, glossaries, term banks, parallel texts, etc. and working in web email applications. Due to the high degree of accessibility in most of the browsers used today, it is possible for visually impaired translators and interpreters to acquire the digital skills related to online sources that can help in their research and handling of materials and communication. The same searching principles that the sighted use apply to the visually impaired: it is a matter of using the correct keywords for a search to yield the expected results. The issue, however, arises when relevant sources such as dictionaries or parallel texts are inaccessible (due to the pictures that do not have alternative text, etc.), according to the students and translators interviewed by Hagemann (86). Some of the most accessible dictionaries include *EUR-Lex*, *IATE, Linguee*, *dict.cc, leo.org, Cambridge Dictionary*, *Merriam-Webster*, *Collins Dictionary*, *The Free Dictionary, onelook.com* etc. These will be examined in the teaching methods presented further.

The above-mentioned skills suggest that screen reading technologies are essential tools which allow access to all the important devices a visually impaired translator or interpreter must operate: computers, smartphones, tablets, Braille devices etc. Furthermore, they are the bridge between the hardware and software component of a technology, enabling visually impaired translators and interpreters to use word processors, CAT tools and the Internet for research and performance. The emphasis placed on digital skills for visually impaired translators reveals their critical role in the training of people who wish to pursue such careers and in their successful professional performance. Nevertheless, it does

not mean that the visually impaired trigger a button and the process occurs within the technology they possess: translation and interpreting are complex and professional training is necessary for a high-quality oral or written translation. Digital skills could be compared to a white cane, not to a visually impaired person's brain. Teaching should then place technology on a secondary level, focusing on the specific translation and interpreting skills the students have to acquire.

There is a relatively small body of literature concerned with teaching methodology for professors of visually impaired translators and interpreters. The study drafted by Bülbül et al. (2015) involved blind students, sighted students, professors, blind translators and educational theorists. The choice of the term "blind" is related to persons who have no usable vision and was not used in a derogatory way (Hagemann 79). On the other hand, Kellett Bidoli's study was mainly written from the perspective of the professors, which leads to an impartial result. Other noteworthy sources which offer an insight into the training of visually impaired translators and interpreters are the articles written by Figiel, Nugroho et al. and Refaat, who discuss the translator's performance and working style from their perspective, i.e. from the point of view of the assessors of their performance, but do not expressly touch on concrete aspects related to teaching. Therefore, the well-defined categories of persons in the German study could represent the basis of the analysis in this article. The purpose of this article is to give a different perspective on the training needs of visually impaired students in Translation and Interpreting so that they can be met in Romanian universities as well. Therefore, this article will look at the aspects discussed by each category of interviewees in the German study.

The three technically blind students gave their opinion on overall aspects related to translation classes, while also explaining their way of working in and outside these academic environments. The results collected reveal that they consider mixed groups, which are composed of sighted and blind students, to have some importance (Bülbül et al. 4), especially regarding macrostrategy

formation through the description of visual elements by the sighted students (Hagemann 82). Furthermore, the translation process is also more detailed in mixed groups due to the help with text formatting by the sighted or the better concentration on the text, more developed listening skills and quick thinking visually impaired offer in return (Hagemann 84). Furthermore, it is of great importance in processing and rendering the layout to be as close as possible to the original, as well as to proofreading (Kellett Bidoli 195). The German study groups' level of inclusion is unique due to their interesting experiment of translating a text with infographics in two versions: one for the sighted audience and the other for the blind audience (Hagemann 82), which caused the students to use different macrostrategies. The detailed descriptions given by the sighted were thus valued in the representation of the infographic on paper so that it was no more a barrier for the understanding of blind readers.

Regarding technological enhancements in and out of the classroom that blind translators and interpreters employ, Suryaningtyas, Figiel, Rodríguez Vázquez and other scholars explain the bridge between the already-mentioned technology and the way it is used in the translation process. Thus, source text reading is achieved with a screen reader, Word processors and CAT tools being the environments where blind translators write their text. The source text must necessarily be prepared in an accessible electronic format. Because of screen reader limitations, the source text reading occurs on different levels: character by character, word by word, sentence by sentence, paragraph by paragraph etc. or even the whole text with the SayAll feature in some screen readers. It depends on the student which type of reading they choose (Bülbül et al. 7; Hagemann 83). On the other hand, interpreters use a Braille display for consecutive interpreting and a digital console for simultaneous interpreting. The inability of Braille devices to display text in an oblique form causes blind interpreters to use linear interpretation, as stated by Dold on her website and by Kellett Bidoli (196). Since there is a limited list of Braille abbreviations and contractions, blind interpreters must either rely

on their memory, according to Kellett Bidoli (196), or invent new symbols and abbreviations. They represent 90% of the entire notation system of the blind interpreters who use Braille devices, as discovered by Dold in her master's thesis on this topic. Dold even devised symbols to mark new paragraphs or the end of the speech in order to maximize the potential of the notation system and to deliver a high-quality interpretation. Dold also described other ways of interpreting. One of them is the use of the slate and stylus, which allows for spatial representation of the notes on the page but is a more time-consuming process than Braille devices, and the information, if written in a wrong way, cannot be corrected. She also encountered an interpreter who used synthetic speech for reading the notes aloud because he lacked Braille skills. More than 90% of his notes consisted of whole words and language switching posed an issue for him. Other methods include whispering into a tape recorder instead of taking notes and then translating simultaneously, or directly recording a speech. The last method was invented by SSLMIT (Kellett Bidoli 197), but there are too many disadvantages regarding the two methods involving recording that they do not represent a central point in the discussion about interpreting by the blind. A final aspect related to the challenges faced by blind interpreters, which can be overcome in a mixed group, is the inaccessibility of movies and slides. All the differences described above are noteworthy aspects to consider by professors of visually impaired students who could experiment with them to determine if they have a beneficial impact on the entire class.

Sighted students in the German study were asked about their attitude to mixed groups. Their answers indirectly point to the greatest disadvantage of such a group: the slower pace of the whole group during the translation process because of verbalization. This leads to their wish that every material should be uploaded on a platform so blind people do not face accessibility issues and sighted students do not have to read the text aloud (Hagemann 80). Consequently, they do not feel being used as assistants (Hagemann 85). Therefore, sighted students do not seem to have a real benefit from mixed groups. However, the study points out the idea that, by

applying teaching methods specifically designed for the blind to the sighted students as well, for example playing source texts in audio format or showing their tactile representation to both categories, they develop thinking in that language, better processing of the text and better choice of macrostrategy (Bülbül et al. 7). Although not insisted upon in the article signed by Bülbül et al., these methods could be further put into practice in Romanian universities for an empirical validation of the discoveries.

As in the case of blind students, the professors were also asked to give their opinion on two aspects, namely their experience with blind students and with mixed groups. As Hagemann's study focuses on mixed groups, Kellett Bidoli's article completes most of the teaching methods applied to visually impaired translators and interpreters in particular. Although the content taught is the same and the professors must give equal opportunities to both the sighted and the blind, there are notable differences related to the technical adaptations that allow the materialization of these processes. The need for materials to be made accessible causes professors to either give their blind students the source texts in advance, a process whose time span is getting shorter and shorter (Kellett Bidoli 191), or to make them accessible according to the WCAG 2.1. Luckily, due to the size of printed Braille, which is, according to Kellett Bidoli, "30 × 30 cm" of thick, heavy paper per page (192) and the dot spacing which involves more pages than ordinary print (194), printed Braille is no longer used in translation classes. It is replaced by electronic Braille with the help of the already-mentioned devices, which means that, if a material has been prepared in compliance with the accessibility checklist proposed by the WCAG 2.1, it can instantaneously be rendered in audio or tactile way. Other aspects that a professor must consider when teaching a blind student are not to diverge much from the lesson plan for employing most of the pre-planned materials (Kellett Bidoli 193), to always mention technical details such as the page of an exercise that the students will solve, the spelling, dictation or description of what is written on the blackboard, the layout of source texts etc. (Kellett Bidoli 192-193). Meanwhile, there are also certain challenges faced by

interpreting professors related to body language, which is difficult to train unless the trainer is a practitioner (Kellett Bidoli 197). The complexity of this area generates countless other particular teaching methods which are difficult to detail in this article. The professors from the University of Mainz/Germersheim focused on mixed groups to address the gaps in the work of blind and visually impaired translators and interpreters. Hagemann argues that, in spite of the advantages of mixed groups mentioned earlier, the professors interviewed consider that mixed groups work at a slightly slower pace except in simultaneous interpreting classes (195). This might validate the preference of blind and visually impaired students for interpreting rather than translation underlined by Kellett Bidoli.

As the opinions of the category of blind translators interviewed for the German study intermingle with those of blind students, they are not as relevant for the topic of this article. Therefore, the last group of people detailed in this article, educational theorists, sheds light on the actual benefit of teaching translation and interpreting to mixed groups. As stated above, the most obvious benefit of mixed groups is the proper handling of visual elements (Bülbül et al. 5). However, intersemiotic translation, though playing an important role, slows down both types of students: visual information confuses the blind and too much description is distracting for the sighted (Bülbül et al. 12). The other comments made by educational theorists concern the already-mentioned attitudes of the blind when handling visual elements which corresponds to their level of self-esteem. Their opinions reflect the result of the teaching methods and complement professors in reasoning the right approach.

Although this study is complete and offers valuable details for the time it was created, artificial intelligence has brought a new era of development in translation and interpreting. ChatGPT was a game-changer in translation and image description. Empirical evidence has proved, however, that it does not equal human translation, while for image description, it could minimize the input of sighted students in mixed groups. For instance, the application

BeMyEyes, dedicated to remote sighted assistance offered by volunteers, integrated an artificial intelligence called BeMyAI which can be interacted with to offer more information on the image. This is the description offered by the application for a picture of Focus 40 Blue Braille display on the Freedom Scientific website shown in figure 1: "The image shows a Focus 40 Blue Braille Display. It's a rectangular device with a row of round blue buttons on each end. In the center, there's a braille display area with several rectangular buttons and directional controls below it. The device is predominantly black with blue accents and has the text 'Focus 40' printed on the front." The user could ask BeMyAI to describe each button and will get a result similar to:

I will describe the buttons from left to right: On the far left, there is a rectangular button with a left-pointing arrow, likely a navigation button. Next to it, there are two small round buttons, possibly shift or control keys. In the center, there is a long rectangular space bar. Mirroring the left side, there are two small round buttons on the right, similar to the ones on the left. On the far right, there is another rectangular button with a right-pointing arrow, likely another navigation button.

As the regular user could argue, it is 99% accurate and other attempts of describing the picture or asking for clarifications yield specific results which, if the interaction happens quickly through Braille screen input or dictation, could dramatically increase productivity even in mixed groups. Romanian artificial intelligence is developing as well and could be a starting point for a more productive stage in translation and interpreting.

Figure 1

Nowadays, however, Romania is still in the early stages of accessible development. According to the National Strategy on the Rights of Persons with Disabilities, apart from other basic needs that are mentioned, but not warranted by the Romanian legislation,

there are few digital accessibility implementations and no standardized approach to inclusive education (Strategia națională privind drepturile persoanelor cu dizabilități "O Românie echitabilă," 2022-2027 5-7). Few visually impaired persons enroll in universities, let alone in translation and interpreting courses. The high schools for the blind offer post-high school studies in kinetotherapy, which is not the only career visually impaired people can pursue. If digital inclusion were achieved and the necessary equipment and training were provided, many of them would certainly pursue careers such as translation or interpreting, as they are generally gifted in learning languages. Centrul de Asistență în Domeniul Tehnologiilor de Acces pentru Persoane cu Deficiențe de Vedere (CATA – The Support Center on Assistive Technology for the Visually Impaired) of Babeș-Bolyai University is the only mechanism implemented to help visually impaired people in the Romanian higher education. It offers practical advice, services and equipment for persons with visual impairment. However, equipment such as Braille devices is very expensive. If such services were offered in each Romanian university or if professors were trained to make their materials and courses accessible, the inclusion that the Romanian law, even the National Strategy on the Rights of Persons with Disabilities, so fervently promotes, would be achieved.

Furthermore, assistive and mainstream technologies used in translation and interpreting must also be taken into account. Braille devices which average 4000 euros in Romania, 1/4th of the price being represented by the import taxes, or other expensive assistive technologies would become cheaper if the demand were higher. Professors should encourage their blind students to experiment with more screen readers and CAT tools to find the perfect formula for their productivity. The students should not forget to use language detection features in screen readers or train their ears to recognize text spoken in another language with a specific synthetic voice. For example, they could use the Romanian voice called Ioana when translating a text from Romanian into English without switching to other Nuance Vocalizer synthesizers provided they are familiar

with its mistaken pronunciation of English words. Regarding CAT tools, even if previous literature states that Trados Studio is not accessible, students should also test it since sustained efforts were made in 2023 for making it screen-reader friendly. Artificial intelligence could also be taken into account as a productivity tool, but not relied upon when delivering translations; the resulted text must be proofread by the human translator. The use of Be My AI should be encouraged during class, its extension for describing any photo instantly captured or shared with BeMyEyes being tremendously useful in the case of digital source texts containing infographics, detailed pictures who are relevant for the understanding of the text etc. Thus, sighted students could only act as validators, and not sighted assistants for the blind. These measures could easily be implemented in the classroom without the need of any regulations regarding higher education.

In conclusion, professors of blind students in Translation and Interpreting programs should focus not only on shaping their professional skills but also on understanding their digital needs to ensure productivity in their work. Regardless of how Romanian institutions deal with the above-mentioned issues, professors should tailor their approach individually to bring about a change in the blind students' translation and interpreting experience. Training could be achieved by reading the literature mentioned in this article and by experimenting since the surge of AI-based technologies has changed the game and CAT tools could look different in the future. The more professors adopt these teaching methods, the more inclusive mainstream education will be.

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