

Digital tools and technologies before, during and after simultaneous interpreting: towards a chronological workflow-based professional and didactic model

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Abstract

Conference interpreting didactics and professional practice is marked by new technology-driven needs, challenges and opportunities. Drawing on the technology-based approach in conference interpreting (Ferreiro-Vázquez/Varajão Moutinho Pereira 2023; Winters et al. 2024; Davitti et al. 2025), this article presents a chronological workflow-based model for interpreting technology use and training. This model results from three professional perspectives: academic training in conference interpreting, CPD (continuous professional development) for interpreters and the professional practice itself through a “practisearcher” perspective. With a particular focus on simultaneous interpreting (SI), a set of digital tools, resources and technologies have been grouped into three main categories based on a user-centered chronological approach: i) before the SI assignment (tools and technologies for the general preparatory phase and for the document-based terminology-specific preparatory phase); ii) during the SI assignment (CAI tools, ASR, prompting, tablet applications) and; iii) after the SI assignment (archiving and sharing data, building a portfolio of documents and files, tracking one’s progress, transcription, subtitles creation and related extra services). The ultimate goal is to provide interpreters, students and trainers with a new methodological framework in the use and teaching of interpreting technology.

Keywords

Interpreting technologies, simultaneous interpreting, interpreter training, simultaneous interpreting, digital tools

The use of technology has always been present in conference interpreting professional practice and training, however simultaneous interpreting (SI) technical equipment had remained largely unchanged for decades (Bertozzi/Cecchi 2023; Pöchhacker/Liu 2024). The recent boom in ICTs, the Covid-19 pandemic and the so-called “AI era” have all had an unprecedented impact on the pace of technological change; thus, research and training cannot afford to lag behind.

In view of this ever-evolving scenario, the whole interpreting community (professionals, scholars, students and trainers) is at a crossroads of challenges and opportunities offered by these new technologies (Fantinuoli 2019). Several attempts have been made in the literature to investigate this “technological turn” and its applications to conference interpreting (Kalina 2010; Fantinuoli 2019; Spinolo/Amato 2020), but little attention has been devoted to providing a clear common framework to select these tools for interpreters’ training and professional practice. Hence, the main research question underlying this article is: which methodological model can be used to select the available tools and technologies for SI practice and training? The answer to this question is also linked to another issue to be addressed by future research developments: can there be a common approach in the use of these resources which goes beyond currently available digital tools and therefore could be applied as a benchmark also in the future? Through the lens of a “practisearcher” (Bendazzoli 2016), the purpose of this contribution is designing a broad methodological framework to select and use digital tools for SI practice and training. In this paper, a practisearcher-based methodological framework is adopted, integrating a tri-role lens (professional interpreter, lecturer and continuous professional development – CPD – trainer) with a three-stage SI workflow (before/during/after) to guide systematic tool selection.

1. Interpreting technology-based studies

Even though interpreting, unlike translation, has often been viewed as an activity that is not particularly related to the use of technology (Fantinuoli 2021), the literature has shown a growing interest in this field. Starting as early as the 1990s and early 2000s there began the creation of the first speech repositories (Carabelli 1997), authoring programs for the creation of computer-based interpreter training materials (de Manuel Jerez 2006; Sandrelli/Hawkins 2006), virtual learning environments (Sandrelli/de Manuel Jerez 2007), corpus-based SI preparation models (Fantinuoli 2006) and terminology-retrieval systems to be used in the booth (Tripepi Winteringham 2010).

The last fifteen years have seen an increasing number of publications on interpreting technology-based studies ranging from: i) CAIT (Computer-Assisted Interpreter Training) tools (Fantinuoli/Prandi 2018; Xu 2018; Corpas Pastor 2022; Ferreira-Vázquez/Varajão Moutinho Pereira 2023; Defrancq *et al.* 2024); ii) distance and remote interpreting (Ziegler/Gigliobianco 2018; Chmiel/Spinolo 2022; Bertozzi/Cecchi 2023); to iii) the applications of machine translation and AI-powered ASR (Automatic Speech Recognition) to conference interpreting (Desmet *et al.* 2018; Fantinuoli/Pisani 2021; Winters *et al.* 2024; Davitti *et al.* 2025).

These studies make it clear that:

[...] the presence of technology is a challenging factor for interpreters. For this reason, in order to successfully integrate technology in interpreted-mediated communication, interpreters need to undergo a process of knowledge and expertise acquisition, understanding the chances and limitations of technology use and integrating them, whenever reasonable, in their daily practice. The design of training modules on ICT seems to be an integral part of such process. (Fantinuoli/Prandi 2018: 162).

In the context of this non-exhaustive recent literature review, there is still lacking a body of specific research identifying clear methodological frameworks for interpreting technologies selection, use and didactic applications.

2. Methodological approach

The identification of the new pedagogic and professional needs in interpreting technology underlying the research questions described above, derives from a “practitioner” approach to this paper (Bendazzoli 2016), where the author is at the same time a professional conference interpreter, academic lecturer and CPD trainer, providing three fields of inquiry. Their analysis allowed the author to combine their different needs and perspectives through the lenses of interpreters working in the private and public sector, trainees/trainers in university-level interpreting institutions and professionals looking for technology-based CPD courses. Hence, the observation points underlying this work are the Italian freelance interpreting market, academic education in conference interpreting¹ and the CPD courses aimed at interpreting professionals.²

Drawing on these three professional perspectives, the specific research objectives of this article can be summarized as follows:

- presenting a chronological model for the use of interpreting technologies based on the typical interpreting workflow to improve it both in professional and training settings. Some attempts have been made in the literature to provide the integration of tools and technologies within a pre-process, peri-process and post-process approach (Fantinuoli 2023; Pöchhacker/Liu 2024); however, a

1 For further information on the author’s contribution to the design of training modules within the MA Program in Interpreting of the University of Bologna, Department of Interpreting and Translation, see Bertozzi (2024a, 2024b) and [<https://site.unibo.it/autoapprendimento-interpretazione/en>] [27/03/2025].

2 With more than 30 synchronous and 9 asynchronous CPD courses, Cabina Doppia has a five-year experience in the design, organization and provision of technology-based training for interpreters and interpreters’ professional associations such as AIIC (International Association of Conference Interpreters), Assointerpreti, AITI (*Associazione Italiana Traduttori e Interpreti*), ANITI (*Associazione Nazionale Italiana Traduttori e Interpreti*), Tradinfo (*Associazione Interpreti e Traduttori*) and ASKOT (Czech Association of Conference Interpreters). Designed and created by Bertozzi & Cecchi. For further information see [<https://www.cabinadoppia.com/en>] [27/03/2025].

clear and methodologically-sound model to be applied to both training and professional environments is still lacking when it comes to selecting digital tools and technologies;

- selecting the tools and technologies to be included in this model on the basis of a set of criteria (such as user-friendliness and availability), and characteristics such as being open-source, multi-device (for pc/tablet) and multi-platform (for Windows/MacOS) wherever possible, including the functionalities offered by these systems (Tab. 5 in Appendix);
- providing a non-exhaustive subjective overview of some tools and technologies that are currently available both for interpreting professional practice and training.

In the light of these methodological assumptions, a key component of the selection process for interpreter software and tools was the establishment of objective and consistent criteria for assessing their usefulness, functionality, ease of use, and accessibility. In this regard, the literature provides a useful framework, the Technology Acceptance Model (TAM), which establishes a direct link to the concepts of perceived user-friendliness and perceived usefulness, both of which are crucial to the present paper. Developed by Davis *et al.* (1989), it suggests that a user's decision to adopt a technology is primarily determined by two key beliefs: its perceived usefulness (PU) and its perceived ease of use (PEOU). Later models were developed building upon the TAM, incorporating additional constructs absent from the original seminal framework, such as hedonic motivation, price value, and habit (Venkatesh *et al.* 2012). These models have also been criticized by some scholars such as Holden/Karsh (2010), who highlight the importance of other factors for technology integration in high cognitive-load workflows, namely user expectations, specific context of use, and workflow compatibility. The primary criteria from the above models were adapted for this paper, having been integrated and revised based on teaching experiences and feedback from students and professional interpreters in the three fields of inquiry: professional conference interpreting, academic training, and CPD. Therefore, the proposed model is based on these criteria and on active observation of usage patterns and feedback (from both user/student and trainer's perspectives) gathered during the actual use of these tools in training and professional practice.

More specifically, the selection criteria for the tools presented below are summarized in Table 5 (see Appendix). This table outlines the general parameters adopted for the purpose of the present research. It should be specified that it represents a snapshot of the features of these tools at the time of writing and is by no means intended as an objective, comprehensive evaluation. Rather, it is the result of the author's didactic and professional experience, supplemented by data³ collected from three types of stakeholders (professional interpreters, interpreting students and lecturers) across the

3 Data collection involving the three stakeholder typologies (Table 5) was conducted through focus groups, interviews, and questionnaires administered to the three analysed groups: professional interpreters participating in CPD courses provided by Cabina Doppia between 2020 and 2025, as well as students and faculty members of the MA in Interpreting at the University of Bologna.

three previously mentioned fields of inquiry: freelance conference interpreting, academic training and CPD. The following selection criteria have been included in Table 5, chosen for their particular significance not only in professional contexts but also (and especially) in educational and training environments:

- Perceived Ease of Use (PEOU), based on the aforementioned TAM model, rated on a “Low-Medium-High” scale;
- Perceived Usefulness (PU), based on the aforementioned TAM model, rated on a “Low-Medium-High” scale;
- Free tool: indicating whether the tool is free, paid, or offers a paid license with functional limitations;
- Device type: whether the tool operates as a desktop version or also includes a mobile version;
- Operating system: compatible operating systems for the given tool;
- Number of functionalities (where applicable). Where relevant, this indicates the availability of task-specific features, rated on a “Low-Medium-High” scale. This section has been compiled only in cases where the tool shows a particularly high number of specific features dedicated to the task in question.

When it comes to identifying the abovementioned specific objectives and the methodological criteria underlying them, the models suggested by Kalina (2005), Albl-Mikasa (2012) and Pöchhacker/Liu (2024) were used as a benchmark. The former set the foundations of the processes preceding and following the interpreting act, followed by a set of evolutions put forward by the last two papers which integrated Kalina’s model. More specifically, for the purpose of this present research, the activity of interpreting was divided into five phases from a process-oriented perspective: i) pre-process (knowledge acquisition, terminology, glossary preparation); ii) peri-process (the conditions in which the interpreting act takes place); iii) para-process (business-related issues that have been reported to be of major relevance by professional interpreters); iv) in-process (the actual teamwork-based translational activity) and; v) post-process (quality check, team collaboration, feedback and follow-up). All these process-oriented phases can be applied to a typical interpreter’s workflow, which, for the specific purposes of this article, can be summarized in three steps : i) before SI (divided into general and document-based terminology-specific preparatory phase) corresponding to the pre-process; ii) during SI (peri/para and in-process) and; iii) after SI (post-process).

Based on this methodological approach, the above-mentioned objectives and criteria have been combined taking into account the three-step perspective, and the analysis resulted in the following general model suggested in Figure 1:

Towards a chronological workflow-based model in the use of interpreting technologies for SI practice and training

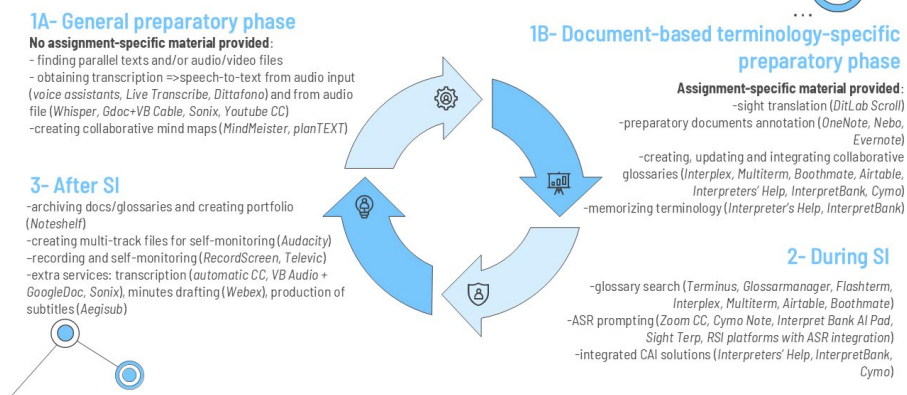


Figure 1: Practisearcher framework - three roles and three SI stages (proposal of workflow-based model)

The model proposed hereafter, which is the result of teaching experiences, observations, and feedback from the three professional areas cited above, is applicable to both educational and professional contexts with some minor modifications. Firstly, with regard to students, their level of preparation must be taken into account. They must already be able to master the basic techniques and skills of simultaneous and consecutive interpreting. Indeed, interpreting technologies are introduced gradually within the MA program at the University of Bologna. For professionals, however, sometimes situations are encountered that are not entirely dissimilar. While the general preparation of professionals is certainly superior to that of students (with various nuances due to professional experience and type of training received), they sometimes exhibit a poor knowledge of the many technological tools applicable to interpreting (due to a lack of specific training or simply difficulties in changing their work methodology). Therefore, the observations made and feedback received in the three abovementioned areas, allow us to make similar proposals in both educational and professional contexts, suggesting analogous technological solutions in light of the fact that academic training (and, of course, CPD) is strongly based on authentic workflows. Among the main differences in the applicability of the proposed tools in the educational versus the professional domain, is the practical need among students to favor more accessible, free, or low-cost solutions. This is why some non-professional software has been included in this model.

3. Digital tools and technologies before SI

Preparation has been widely recognized in the literature as one of the most important phases of any interpreting task (Fantinuoli 2017), making it possible to bridge linguistic and non-linguistic gaps between speakers and interpreters (Will 2009), lowering the in-process cognitive load (Stoll 2009) and increasing self-confidence among trainees (Díaz-Galaz *et al.* 2015). In this phase, researchers showed that there is a two-fold knowledge gap that interpreters must bridge: the first involving domain/thematic knowledge and the second including linguistic terminology-based knowledge. These two aspects co-build a complex system combining language, content, situational and thematic preparation (Will 2009). A relatively small body of research confirmed that technology can streamline, support and make this time-consuming phase easier, especially when it comes to collaborative preparation in interpreters'/trainees' teams (Díaz-Galaz *et al.* 2015; Costa *et al.* 2016; Fantinuoli 2017; Xu 2018; Ferreiro-Vázquez/Varajão Moutinho Pereira 2023; Winters *et al.* 2024).

Based on the analysis of the three fields described above, the complex system underlying the preparatory phase has been divided into two sub-sections: a general preparatory phase and a document-based, terminology-specific preparatory phase (Fig. 1). The former represents the early stage of SI preparation, when no assignment-specific documentation has been provided and/or no details about the SI training task have been yet disclosed. The latter involves a later stage of the pre-process, where some specific documentation and/or details on the SI assignment/task have been provided.

3.1 General preparatory phase

In the light of the process-oriented approach adopted for the purpose of this paper, the earliest stage of SI preparation included in this workflow-based model was identified as the “general preparatory phase”, which presents some similar characteristics both in professional and training environments. Within the context of a typical interpreted event, interpreters are normally hired in advance and, at the beginning, they may have only general information available on the type of conference, the topic and the speakers. The same often applies to training. Before an SI exercise/exam, at the earliest stage, it is common practice to provide only some information on the subject matter and/or the speakers. That is why, in this phase of the process, only general domain-related preparation (Fantinuoli 2017) is possible. On the one hand, interpreters and trainees seem to be more prone or used to terminological preparation and may find it difficult to decide what to do when they are at the earliest stage of the process with no specific indications on the forthcoming assignment/task (Sicari 2016). On the other hand, not only is domain-related preparation possible in this phase, but it has been proved to be important for successful communication (McNamara/O'Reilly 2009). As was indicated by Fantinuoli (2017: 26):

[t]he domain or topic-specific knowledge concerns the expertise in a specific topic, information about the speaker, the situational context, etc. Communication among conference participants is based on knowledge which is shared by discourse producers

and discourse receivers and which is indispensable to successful communication. This knowledge has been identified as important in enhancing interpreters' performance because it has a major impact on the comprehension phase, as indicated by most cognitive models of translation and interpreting.

Preparation aimed at topic and situational-oriented knowledge can therefore be based on reading parallel texts or listening to audiovisual material on the same topic that might be touched upon in the actual in-process phase and/or by the same speaker(s) who is(are) expected to deliver the original speech(es). Working on these materials before the assignment was reported to be beneficial for interpreters, as demonstrated by Stoll (2009) in his experiment on corpus-based, technology-assisted preparation procedures. It improves reformulation skills during SI and helps to anticipate and predict information, which has positive implications on the cognitive load in the reception phase.

Against this background, technology can be included in the process even at its earliest stage with positive effects in terms of time management, efficiency and collaborative work in the general preparatory phase. After finding parallel audiovisual materials, these can be usefully transcribed for several purposes providing: i) a broader view of the topic and the speaker(s); ii) better control over the content dealt with; iii) improved understanding of difficult parts (if any); and iv) easier subsequent analysis (terminology extraction, thematic preparation, topic-related knowledge, etc.). Several technological tools are available to make a time-consuming activity such as transcription easier. These include speech-to-text systems which are currently able to transcribe speech both from microphone audio input (i.e. reading aloud a speech), and audiovisual files (i.e. transcribing directly from a pre-recorded file). The former possibility may be useful in case the interpreter/trainee wants to work in teams, where one or more colleagues read aloud or improvise a speech, and the latter solution is suitable when parallel audiovisual files have been provided or can be found on the internet. Table 1 summarizes some of the possible speech-to-text systems currently available (selected on the basis of availability, accessibility and user-friendliness criteria), from the most basic free solutions, to the most complete, reliable professional tools:

General preparatory phase	
Speech-to-text from audio input	
Integrated AI voice assistants (Google Assistant, Gemini, Siri etc.)	<ul style="list-style-type: none"> • Often integrated and freely available in many devices • Proprietary (Siri for iOS) or cross-platform (Android, iOS) • If integrated, no need to download any apps • Easy to use from mobile devices • User-friendly thanks to VUI (Voice-User Interface) • Support multiple languages • Reliability may vary significantly from system to system
Google Live Transcribe (and/or Google Recorder)	<ul style="list-style-type: none"> • Speech-to-text app for mobile devices • Android-based • User-friendly • Supports multiple languages
DIT.tafono	<ul style="list-style-type: none"> • Voice recognition system developed within the University of Bologna • No app installation needed • Browser-based, working on Chrome and Chrome-derived systems • Simple, user-friendly interface • Currently available in 12 languages • Text editor interface, with keyboard shortcuts and automatic replacement of punctuation • Easy to export the text file in Word/txt files
Speech-to-text from audio/video file	
GoogleDoc + VB Audio Cable	<ul style="list-style-type: none"> • Workaround combining the use of virtual audio cables (VB) and GDoc • Download VB Audio Cables, configuration needed to make the device listen to its own files being played • GDoc has a mic function transcribing speech • GDoc cannot be minimized during transcription and the process will take the same duration of the speech • Transcription will be in GDoc format, ready for editing/sharing
Youtube CC	<ul style="list-style-type: none"> • Available for many videos and languages • Automatic closed-captioning (CC) reliability improved, but may still vary significantly • CCs can be used as a starting point for subsequent editing
Whisper (OpenAI)	<ul style="list-style-type: none"> • Open-source, multi-platform software • Machine learning model for speech recognition available in multiple languages, based on deep neural networks • Different models available • Possibility to choose the transcript format
Sonix	<ul style="list-style-type: none"> • Proprietary license-based commercial software (pay-per-use pricing) • User-friendly interface, designed also for subtitles elaboration • Professional output, divided by different speakers, with timecodes • Exportable in different formats

Table 1: General preparatory phase – speech-to-text systems

Starting from speech-to-text systems working from audio input (Table 1), there are many technical solutions ranging from integrated AI voice assistants such as Google Assistant or Gemini,⁴ to Google Live Transcribe,⁵ an Android-based instant captioning application, and DIT.tafono,⁶ a browser-based solution developed within the University of Bologna. As far as speech-to-text from audio/video files is concerned, there is a wide range of technical possibilities to choose from, starting from the most basic workarounds (i.e. using the voice recognition functionality in GoogleDocs⁷ together with some virtual audio cables such as VB Audio Cables⁸ allowing the device to listen to and transcribe from its own sound

4 <<https://cloud.google.com/speech-to-text>> [2/04/2025]

5 <<https://www.android.com/accessibility/live-transcribe/>> [2/04/2025]

6 <<https://dittafono.ditlab.it/>> [2/04/2025]

7 <<https://docs.google.com>> [2/04/2025]

8 < <https://vb-audio.com/Cable/>> [2/04/2025]. In short, a virtual audio cable is a piece of software that acts like a digital patch cord, letting you send audio from one application to

card). Alternatively, one can choose from the possible applications of Youtube automatic closed-captions,⁹ or turn to the most advanced solutions, such as OpenAI's Whisper,¹⁰ an open-source multi-platform system, or Sonix,¹¹ proprietary license-based automatic speech recognition (ASR) software.

Another useful activity within the general preparatory phase is mind mapping (Austermühl 2012; Li 2023) which can help to combine conceptual, situational and terminological knowledge at the same time. Mind mapping makes it possible to organize information and communicate ideas in a visual way, putting together the written and spoken mediums. If applied to peer-learning in the general preparatory phase with collaborative brainstorming in groups of interpreters/trainees, mind mapping can be a useful tool for thematic and domain-specific preparation, as well as in any following terminological work. This technique has been adopted in consecutive note-taking training (Gillies 2014), in speechmaking (Araújo/Correia 2020), but also in the preparatory stages of an interpreting assignment (Ondřeková 2013), with positive effects on documentary research, domain knowledge and linguistic preparation. More specifically, in his students' guide to consecutive interpreting, Gillies (2014) holds that mind mapping is an invaluable preparatory exercise that leads to a more profound understanding of the speech content and structure. Araújo/Correia (2020) provided a case study that details the design and application of a specific hybrid teaching methodology combining speechmaking, mind mapping, and consecutive interpreting exercises to develop the students' writing and public speaking skills. Ondřeková (2013) conducted an experimental survey involving students in an interpreting seminar, resulting in the findings that the key benefits of mind mapping are structured analysis of the speech, enhanced comprehension, more efficient glossary building and improved memory. Again, technology can make the mind mapping design phase more effective and efficient, enabling collaborative real-time creation of mind maps and user-friendly export/sharing of these files, making teamwork easier. There are many multi-device (tablet/pc) multi-platform (Android/iOS) applications currently available for mind mapping creation. One of them is Mind Meister,¹² a web-based application allowing to visualize, edit, share and present collaborative mind maps via the cloud. A similar tool is planTEXT,¹³ a mind-mapping tool describing its front-end architecture, which has been assessed by students (Lopes *et al.* 2018).

3.2 Document-based terminology-specific preparatory phase

After the initial, general preparatory phase, the typical workflow within the pre-process stage normally continues in the case of professional interpreters, with the provision of documentation on the upcoming event (papers, slides, or any other assignment-specific material). In the case of interpreting trainees, there is disclosure of some more

another on the computer.

9 <<https://www.youtube.com/>> [2/04/2025]

10 <<https://openai.com/index/whisper/>> [2/04/2025]

11 <<https://sonix.ai/>> [2/04/2025]

12 <<https://www.mindmeister.com>> [2/04/2025]

13 <<https://ieeexplore.ieee.org/document/8472047>> [2/04/2025]

detailed information on the subsequent SI exercise/exam. Research-driven (Fantinuoli 2017) and anecdotal evidence from the didactic experience within the MA Program in Interpreting of the University of Bologna confirm that, at this stage, preparation usually becomes more task-specific, focusing on terminology and phraseology selection, extraction, organization and memorization, but also on the study of the specific characteristics of a particular setting/speaker(s). For many practitioners, identifying and studying the domain-specific terminology represents the main part of the preparatory phase (Moser-Mercer 1992), but it has also been demonstrated that phraseological knowledge plays a crucial role in the comprehension phase, in reformulation and, more generally, in lowering the in-process cognitive load (Stoll 2009).

This stage of preparatory work is reported to be time and resource-consuming both by interpreters and trainees. Therefore, technology can be used in this phase for many purposes, which have been summarized in Table 2.

Document-based terminology-specific preparatory phase	
Sight translation of preparatory documents	
DITLab Scroller	<ul style="list-style-type: none"> open-source web-based tool for sight translation designed for the practice and objective human evaluation of sight translation performance simulating real-time speech flow by scrolling text at customizable speed, offering objective performance tracking and adaptive display settings
Annotating preparatory documents	
MS One Note	<ul style="list-style-type: none"> multi-device (pc/tablet) multi-platform (Android, iOS) app to collect, annotate, highlight, underline documents (PDF, PPT, TXT and many more) converting handwriting to digitized text possibility to insert pictures, audio files and lists within the document
Nebo	<ul style="list-style-type: none"> tablet-designed, multi-platform (Android, iOS) app to collect, annotate, highlight, underline documents (PDF, PPT, TXT and many more) converting handwriting to digitized text adding graphs and maths conversion
Evernote	<ul style="list-style-type: none"> multi-device (pc/tablet) multi-platform (Windows, iOS) app quite comprehensive free version PDF annotation, document search, offline version
Creating, updating, integrating collaborative glossaries	
Interplex	<ul style="list-style-type: none"> proprietary glossary management program for both interpreters and translators available for Windows and Mac share databases with other Interplex users using Airdrop import from / export to Excel
SDL Multiterm	<ul style="list-style-type: none"> terminology management tool to store and manage multilingual terminology designed for translators, but applicable to interpretation too Windows-based proprietary software
Boothmate	<ul style="list-style-type: none"> Interpreter's Help glossary management application browser-based application working offline, automatically synchronizing glossaries
Airtable	<ul style="list-style-type: none"> collaborative proprietary in-cloud software, with quite complete free version spreadsheet-database hybrid, with the features of a database but applied to a spreadsheet not specifically designed for glossaries but applicable to terminology management user-friendly interface, good usability, quick search especially from tablet devices
Interpret Bank	<ul style="list-style-type: none"> complete CAI tool for Windows and Mac, license-based software (Windows and MacOS) designed for interpreters, wide range of functionalities, including terminology management access to glossaries on any mobile device through WebApp create and managing all glossaries in a single (private or public) database fast term lookup, even if offline
Cymo	<ul style="list-style-type: none"> integrated solution for ASR + owned glossaries designed to handle complex multitasking in interpreting (note-taking, ASR prompting, glossary management, MT) apps for Windows, Mac, and iPad. Pay-per-minute pricing system
Memorizing terminology	
Interpreters' Help	<ul style="list-style-type: none"> comprehensive solution for interpreters. Proprietary multi-platform software glossary management features, like glossary creation, import/export, look up public glossaries shared among the users' community terminology memorization tool (glossary learning mode)
Interpret Bank	<ul style="list-style-type: none"> (see above) Easy-to-use terminology memorization feature also from mobile devices

Table 2: Document-based terminology-specific preparatory phase – suggested tools

Among the many activities that both practitioners and trainees can perform in this phase of the workflow, sight translation of assignment-specific documents proved to be particularly useful in experimental settings both for students and professionals, not only as a preparatory activity, but also as a form of professional practice (Li 2024). As a matter of fact, sight translation has been considered to be a precursor of SI skills (Lambert 2004) and as a tool for preparation in conference interpreting assignments (Moser-Mercer 1995)¹⁴. Technology can certainly support interpreters and trainees in this activity. Within the University of Bologna, a specific open-source, web-based tool was developed both for the practice and objective human evaluation of sight translation performance. DITLab Scroller¹⁵ simulates real-time speech flow by scrolling text at customizable speeds, offering objective performance tracking and adaptive display settings.

Another underexplored possibility within the document-based preparatory phase is digital annotation of assignment-specific materials (PDFs, slides, papers, etc.). Underlining, highlighting or adding handwriting to a digital document can support memory in the pre-SI study phase (both for terminology and thematic knowledge). This can be also useful while interpreting, especially if using a tablet device, to have a visual-effective reminder of some terms, parts of the speech or any other important elements to remember. Moreover, document annotation has been considered as a “useful emergency strategy when interpreters receive written speeches to be read aloud shortly before the conference starts” (Prandi 2023: 39). Table 2 summarizes some of the tools currently available for document annotation which might be applied both to professional practice and training, such as Microsoft One Note,¹⁶ Nebo¹⁷ and Evernote,¹⁸ multi-device and multi-platform applications to collect, annotate, highlight or underline PDFs and other file formats. Both contexts analyzed in the present paper (professional practice and interpreter training) reported beneficial implications of the use of these tools in glossary memorization and terminology-retrieval while interpreting.

Glossary creation is one of the main activities carried out in this phase, as is reported in the literature (Fantinuoli 2017). As it is a time-consuming task, technology can meet the many different needs that interpreters may have at this stage, from terminology selection and systematization, glossary design, creation, import and export, sharing and integration, with a particular focus on collaborative work. As a matter of fact, teamwork proved to be especially effective in this phase and “solutions for collaborative work are all perceived as useful innovations when compared to traditional, non-interpreter-specific solutions” (Prandi 2020: no pp.). Table 2 summarizes

14 Despite general consensus in the literature regarding the usefulness of sight translation as a didactic tool, there is still some controversy on this topic. Since the early foundational studies by Rozan (1956) and then Gile (1995), some scholars have argued that sight translation in interpreter training might promote calques due to its visual interference and may bear little resemblance to the process of simultaneous interpreting.

15 <<https://scroller.dipintra.it/>> [3/04/2025]

16 <<https://www.onenote.com>> [3/04/2025]

17 <<https://www.nebo.app>> [3/04/2025]

18 <<https://evernote.com/it-it>> [3/04/2025]

the main features of some of the currently available glossary management tools. The current scenario offers products that have been specifically aimed at interpreters, such as Interplex¹⁹ and Boothmate,²⁰ other solutions that have not been originally designed for interpreters but can be applied to conference interpreting terminology management such as SDL Multiterm²¹ and Airtable,²² as well as comprehensive all-in-one CAI software such as InterpretBank,²³ Interpreters' Help²⁴ and Cymo Note²⁵ (for further details, see Table 2).

After collecting, selecting and organizing terminology, the latter must be memorized by interpreters before the assignment, which can be a difficult task. Some digital tools have gamified this process, with the purpose of making terminology memorization easier, more pleasant and collaborative (i.e. terms extracted by glossaries created by a group of interpreters can be used for these types of memory games). Some examples are the “glossary learning”²⁶ function in Interpreters' Help, featuring flashcards and memory games, or InterpretBank's terminology memorization function,²⁷ which can be easily accessed also from mobile devices. These features have been reported to be useful in the document-based preparatory phase both by practitioners and trainees.

4. Digital tools and technologies during SI

The so-called “in-process” stage may seem to be the apex of any interpreting activity, and in some ways it is. However, many tasks performed in this phase are the result of what has been done before that SI assignment/exercise and after the previous assignments/exercises. For this reason, only two main groups of activities have been defined in this phase: computer-assisted terminology lookup and ASR (automatic speech recognition) applications during SI (Table 3).

Researchers agree that this is the phase of the SI workflow where CAI tools can make a difference, especially the so-called “primary CAI tools”, namely those specifically tailored to the cognitive in-process needs, and the so-called “integrated CAI tools”, representing a complete all-in-one interpreting workstation (Will 2020; Prandi 2023). Among the different functions offered by the latter category of CAI tools, two of them have been selected for the purpose of this present paper within the in-process phase (terminology lookup and ASR during SI), being two of the most frequently-used and cognitive-demanding activities where technology can be applied to “externalize” some of these extra cognitive efforts (Pym 2011).

19 <<https://www.fourwillows.com/interplex.html>> [3/04/2025]

20 <<https://boothmate.app/home>> [3/04/2025]

21 <<https://www.trados.com/product/multiterm/>> [3/04/2025]

22 <<https://www.airtable.com/>> [3/04/2025]

23 <<https://www.interpretebank.com/site/>> [3/04/2025]

24 <<https://interpretershelp.com/>> [3/04/2025]

25 <<https://www.cymo.io/en/index.html>> [3/04/2025]

26 <https://interpretershelp.com/help/glossary_learning_mode> [3/04/2025]

27 <<https://www.interpretebank.com/site/docs/v4/docs-page.html#section-7>> [3/04/2025]

Whilst interpreting, manual terminology lookup requires additional attentional resources (Prandi 2023) to type the word (or part of it), locate the relevant term within a glossary and read the suggested rendition into the target language. That is why integrated CAI tools such as InterpretBank can make this operation easier. They reduce the amount of visual input since they automatically select those entries beginning with the typed letters and it is not necessary to place the cursor in the search bar, which is cleared automatically after each query (*Ibid.*: 100).

In any case, manual terminology lookup during SI might “interfere with the speech, the auditory stream, as both elements are verbal and cognitive-perceptual inputs” (Gieshoff 2018: 74-75). For this reason, increasingly more integrated CAI tools are offering ASR functionalities combined with terminology extraction tools. Several studies have shown that ASR applications within the in-process phase can help lower the cognitive load (Prandi 2023), since it becomes easier to identify terms more quickly, less manual/visual coordination is required, and production and comprehension are facilitated thanks to ASR prompting, resulting in fewer omissions and errors (Chmiel *et al.* 2020; Seeber *et al.* 2020). For the purposes of this paper, some ASR tools have been included in the workflow-based model, since they had beneficial effects both for practitioners and trainees according to the aforementioned scholars.

Table 3 illustrates the main tools selected for the in-process phase, divided into three categories: i) terminology lookup or secondary CAI tools (Will 2020) for glossary creation, management and lookup; ii) ASR applications, with interpreting-specific and general-purpose solutions and iii) integrated or primary CAI tools, comprehensive all-in-one tools to be used all through the workflow. The first group includes free Windows-based software such as Glossarmanager²⁸ and Terminus,²⁹ cloud-based or web applications such as Airtable³⁰ and proprietary terminology management software, such as Interplex,³¹ Flashterm,³² SDL Multiterm³³ or Boothmate.³⁴ The second category includes some ASR applications that can be used to support the SI process, from the most basic ones such as the closed captions (CC) functionality in Zoom, to the most sophisticated solutions that are increasingly being integrated into many commercial RSI platforms (such as Kudo,³⁵ SmarTerp,³⁶ Interactio³⁷ or Green Terp³⁸ which is launching an off-line ASR function). This category also includes the latest applications developed for consecutive interpreting (such as InterpretBank AI Pad³⁹ or Sight Terp)⁴⁰ that can also be applied to SI (Fantinuoli 2023; Restuccia 2024). In the third

28 <<https://www.glossarmanager.de/>> [7/04/2025]

29 <<https://terminus.iula.upf.edu/cgi-bin/terminus2.0/terminus.pl?Int=En>> [7/04/2025]

30 <<https://www.airtable.com/>> [7/04/2025]

31 <<https://www.fourwillows.com/interplex.html>> [7/04/2025]

32 <<https://www.flashterm.eu/>> [7/04/2025]

33 <<https://www.trados.com/product/multiterm/>> [7/04/2025]

34 <<https://boothmate.app/home>> [7/04/2025]

35 <<https://kudo.ai/>> [7/04/2025]

36 <<https://smarterp.me/>> [7/04/2025]

37 <<https://www.interactio.com/>> [7/04/2025]

38 <<https://www.gtmeeting.com/>> [14/04/2025]

39 <<https://asr.interpretbank.com/pad>> [7/04/2025]

40 <<https://www.sightterp.net/>> [7/04/2025]

During SI	
Terminology lookup	
Terminus	<ul style="list-style-type: none"> • application for corpus and terminology management • textual corpus search, compilation and analysis, term extraction, glossary and project management, database creation and maintenance
Glossarmanager	<ul style="list-style-type: none"> • free Windows-based software • designed for interpreters • easy-to-look up in the booth
Flashterm	<ul style="list-style-type: none"> • cloud-based proprietary software • based on Claris FileMaker (for online app creation) • not term-based but concept-based tool • possibility to include images • quick terminology look-up, both within single glossaries and/or in the whole database
Interplex	<ul style="list-style-type: none"> • proprietary glossary management program for both interpreters and translators • available for Windows, Mac and iOS • groups all terms relating to a particular subject or field into multilingual glossaries that can be searched quickly • permits to have several glossaries open at the same time
SDL Multiterm	<ul style="list-style-type: none"> • designed for translators, but applicable to interpretation too • Windows-based proprietary software • useful visual reference feature • very advanced, but not always user-friendly to look up in the booth
Airtable	<ul style="list-style-type: none"> • collaborative proprietary in-cloud software, with quite complete free version • not specifically designed for glossaries but applicable to terminology management • user-friendly interface, good usability, quick search especially from tablet devices
Boothmate	<ul style="list-style-type: none"> • Interpreters' Help glossary management application • browser-based application • working offline, automatically synchronizing glossaries
ASR applications	
Zoom CC	<ul style="list-style-type: none"> • integrated function in many Zoom plans • need to be enabled by the meeting host • easy to activate/deactivate • can be viewed as subtitles or full transcript (side window) • variable reliability depending on language, sound quality, speech characteristics, etc.
InterpretBank AI Pad	<ul style="list-style-type: none"> • browser-based beta version for Windows computers or tablets • digital notepad designed for consecutive but applicable to SI as well • incorporates real-time speech recognition technology, with automatic highlighting of numbers • users can select specific words or phrases for real-time MT • dedicated note-taking panel situated on the right side of the screen
Sight Terp	<ul style="list-style-type: none"> • web-based tool designed for consecutive with ASR functions, but also applicable to SI • live transcription of source speech, neural Machine Translation for immediate, parallel translation of text, Named Entity Recognition (NER) for real-time highlighting of important text elements (numbers) • embedded third-party digital notepad designed to replicate the tactile experience of pen and paper
RSI platforms integrating ASR	<ul style="list-style-type: none"> • increasingly more RSI commercial platforms are integrating ASR functions, like SmartTerp, Interactio or Kudo
Integrated CAI tools	
Interpreters' Help	<ul style="list-style-type: none"> • comprehensive solution for interpreters. Proprietary multi-platform software • glossary management features, like glossary creation, import/export, look up • public glossary farm shared among the users' community • no ASR functionality
InterpretBank	<ul style="list-style-type: none"> • complete CAI tool for Windows and Mac, license-based software (Windows and macOS)
	<ul style="list-style-type: none"> • designed for interpreters, wide range of functionalities, including terminology management and ASR prompting • fast term lookup, even if offline • ASR prompting available with Pro Pack • ASR is cloud-based, automatically transcribes speech from 12 languages in real-time with low latency, and allows to look up your curated glossary automatically • ASR is split into different windows: transcript, numbers and glossary terms are displayed separately
Cymo	<ul style="list-style-type: none"> • integrated solution for ASR + owned glossaries • designed to handle complex multitasking in interpreting (note-taking, ASR prompting, glossary management, MT) • apps for Windows, Mac, and iPad. Pay-per-minute pricing system • multiple ASR engines: Tencent Cloud ASR engine, Microsoft Azure, Tencent Cloud Speech-to-Text and iFlyTek Speech-to-Text • all-in-one display of ASR, numbers and glossary terms (in different colors)

Table 3: In-process phase – suggested tools

category, there are integrated CAI tools such as Interpreters' Help,⁴¹ InterpretBank⁴² or Cymo,⁴³ with a range of pre-process and in-process functionalities, including ASR-prompting in the last two applications.

5. Digital tools and technologies after SI

Most scholars agree on the fact that the act of interpreting does not end with the in-process phase. Both for practitioners and trainees, the “post-process” stage is particularly important, and it may have different outcomes, even though the intrinsic methodological foundations are rather similar (Kalina 2005; Albl-Mikasa 2012; Pöchhacker/Liu 2024). Such studies identified some activities that are typically carried out in this phase, such as terminological wrap-up and follow-up, self-evaluation and quality check. However, Albl-Mikasa (2012: 85) points out that, in her experiment, “the interviewees did not give any priority to updating glossaries and databases on the basis of new terminological findings and insights from the conference”, therefore highlighting the need for further research on this type of post-process operations. The same study identifies quality control as one of the skills applied to this phase, reporting, in particular, that many interpreters find it useful to record their performance or part of it to be able to scan and find errors: “ten minutes are often enough to filter out unwanted markers, such as repeated “ums”, an unpleasant voice, tense articulation, heavy breathing, exaggerated accents, uneven *décalage*, disfluencies” (*Ibid*: 85).

For students, this stage can be even more relevant to their training. Self-monitoring and self-regulation in the follow-up phase are of outmost importance, and one of the possible tools aimed at improving these skills is the student's portfolio (Mirek 2020). It can be described as a “purposeful, systematic process of collecting and evaluating student products to document progress toward the attainment of learning targets” (McMillan 1997: 231). A process-oriented portfolio is a collection of student work accompanied by self-reflections (Arumí Ribas 2010: 108), which is particularly relevant to SI. Owing to its immediacy and speed, it may be difficult for students to be fully aware of their weaknesses in SI. Therefore, collecting tangible evidence of their progress can be useful to improve self-observation (analyzing the task), self-judgement (setting specific goals and monitoring progress) and self-reaction (adjusting the strategies and efforts based on their perception of the ongoing progress) (Moser-Mercer 2008). These abilities are intrinsically linked to self-assessment skills and, if organized in a collaborative way, also to peer-assessment enhancement (Bertozzi 2024a), which constitute the foundation of continuous self-learning (Bertozzi 2024b).

Some digital tools in Table 4, can be useful in creating a well-organized student portfolio for SI. One of them is Noteshelf,⁴⁴ a multi-platform, multi-device note-taking app which enables users to organize notes and related documents in different formats, and to archive (and then retrieve more easily) all the assignment-related documents,

41 <<https://interpretershelp.com/>> [7/04/2025]

42 <<https://www.interpretbank.com/index.html>> [7/04/2025]

43 <<https://www.cymo.io>> [7/04/2025]

44 <<https://www.noteshelf.net/>> [10/04/2025]

After SI	
Portfolio creation	
Noteshelf	<ul style="list-style-type: none"> • multi-platform, multi-device note-taking app • allowing to organize notes and related documents (in different formats) • easy archiving, easy retrieval: suitable for personal portfolio creation
Recording and self-monitoring	
Audacity	<ul style="list-style-type: none"> • free, open-source digital audio editor and recording application software • available for Windows, macOS, Linux, and other Unix-like operating systems • capable of creating multi-track audio files, with the original floor recording on one track and the possibility to choose the booth recordings from the other tracks (from a drop-down menu)
Recordscreen.io	<ul style="list-style-type: none"> • free browser-based application • records from the browser (combining webcam + screen video recording) • no installation required, videos are processed in the browser
Televic InterpreterQ Media Player	<ul style="list-style-type: none"> • Windows-based application designed for interpreters' training and monitoring • student and teacher's interface, suitable both for consecutive and simultaneous • allowing to record the original speech and the interpreted rendition in the same file, creating a personal portfolio
Extra linguistic services after the assignment	
For transcription: Zoom CC	<ul style="list-style-type: none"> • integrated function in many Zoom plans • need to be enabled by the meeting host • easy to activate/deactivate • can be viewed as subtitles or full transcript (side window) • variable reliability depending on language, sound quality, speech characteristics, etc.
For transcription: VB Cable + GDoc	<ul style="list-style-type: none"> • workaround combining the use of virtual audio cables (VB) and GDoc • download VB Audio Cables, configuration needed to make the device listening to its own files being played • GDoc has a mic function transcribing speech • GDoc cannot be minimized during transcription and the process will take the same duration of the speech • transcription will be in GDoc format, ready for editing/sharing
For transcription: Sonix	<ul style="list-style-type: none"> • proprietary license-based commercial software (pay-per-use pricing) • user-friendly interface, designed also for subtitles elaboration • professional output, divided by different speakers, with timecodes • exportable in different formats
For minutes drafting: Webex Assistant	<ul style="list-style-type: none"> • manual note-taker function, specifically designed for minutes drafting • automatic CC is also possible
For minutes drafting: Fathom	<ul style="list-style-type: none"> • free plug-in for Zoom • record Zoom meetings <i>in cloud</i> (even without license) • automatically transcribe speech • select video clips while the meeting is underway • after the meeting, generate video clips based on the selection made underway, send and synchronize clips with other CRM or apps/programs
For subtitles creation: Aegisub	<ul style="list-style-type: none"> • free, cross-platform, open-source tool for creating and modifying subtitles • built-in real-time video preview • with timecode

Table 4: Post-process phase – suggested tools

such as glossaries, presentations, informative materials, as well as self/peer-assessment sheets. Another essential task to enable self-monitoring is self-recording, preferably including also the original speech and/or other visual prompts, such as presentations, preparatory documents and graphs, if any. There are many tools available, ranging from in-built recording functionalities in some RSI and general-purpose platforms (such as Zoom or Webex), to external applications, such as Audacity,⁴⁵ a free open-source digital audio editor and recording application which makes it possible to create multi-track audio files (with the possibility to have the original speech and the

45 <<https://www.audacityteam.org/>> [11/04/2025]

interpreted version/s in one file), and Recordscreen,⁴⁶ a free browser-based application combining webcam recording plus screen video recording, which is particularly useful to self-monitor the interpreter's video and any visual input shared by the speaker. Some recording tools have been specifically developed for interpreter training. That is the case of Televic InterpreterQ Media Player,⁴⁷ a Windows-based application which records the original speech and the interpreter's rendition in the same file, thus creating a personal portfolio suitable for both consecutive and SI (Table 4).

As regards practitioners, the post-process phase is also a good moment in the interpreter's workflow to prepare follow-up assignments (Albl-Mikasa 2012) and to provide additional linguistic services to be carried out after SI itself. Some additional services, such as transcription of the interpreted event, minute drafting (especially for corporate or Board of Directors' meetings) and subtitle creation, can be made easier by the use of digital interpreting technologies. Speech-to-text systems can support interpreters and linguists when it comes to providing after-the-event services based on the audio/video recording of a meeting such as, reporting, follow-up, subsequent publication of audiovisual material, and many others. Several tools can help support the provision of these additional services, such as transcription (Table 4). More and more general-purpose platforms (i.e. Zoom and Webex) have their own closed-captioning system which can be used as a starting point to transcribe an event. Alternatively, some workarounds can be applied to obtain a draft transcript, such as using VB Audio Cables⁴⁸ and the Google Docs automatic transcription function.⁴⁹ There are also professional AI-based solutions such as Sonix,⁵⁰ proprietary pay-per-use software providing reliable transcripts with timecodes. Some platforms used for RSI have added a specific minute-drafting function. This is the case of Webex, with its "note-taker" function, which can be manual or automated. Drafting the minutes of an interpreted meeting can also be made easier by some free applications such as Fathom,⁵¹ a specific plug-in for Zoom combining video recording, automatic transcription and the selection of video clips while a meeting is underway (Table 4). Among the many extra services made possible by digital technologies, it is worth mentioning subtitle creation for part or the whole video-recorded event. While SI is a real-time, impromptu service intended for use during a meeting, Premiere subtitles are designed for later use, even long after the end of an event. That is why interpreters/linguists may be asked to provide them after the interpretation itself. A good starting point for subsequent subtitle creation is using some of the above-mentioned speech-to-text systems and a

46 <<https://recordscreen.io/>> [11/04/2025]

47 <<https://support.televic-education.com/hc/en-us/articles/360008595879-Installing-InterpreterQ-Media-Player>> [11/04/2025]

48 <<https://vb-audio.com/Cable/>> [11/04/2025]

49 Computer audio can be automatically transcribed by using VB-Audio Virtual Cable to digitally route your computer's sound output into its microphone input, which Google Docs' Voice typing feature then "hears" and converts to text. This workaround essentially tricks your computer into thinking that the audio from a video or sound file is microphone input.

50 <<https://sonix.ai/>> [11/04/2025]

51 <<https://fathom.video/>> [11/04/2025]

free open-source application, Aegisub,⁵² which makes it possible to create, edit and embed subtitles in a video file (Table 4). It is worth noting, however, that there are also more professional systems, such as the already mentioned Sonix or Adobe, Final Cut Pro and Subtitle Edit, among other tools. In this paper, in the light of its possible didactic applications, preference was given to the use of free, multi-platform software over paid alternatives (Table 4).

6. Conclusions

In this paper existing digital tools were reviewed first for each stage of SI. Then an integrated workflow was proposed – grounded in both teaching and practice – to give trainers and practitioners a clear roadmap. The methodological approach adopted relies on three perspectives: academic conference interpreter training, CPD aimed at professional interpreters and practitioners themselves in their daily workflow, considering also their specific needs and expectations from interpreting technologies (Kalina 2005; Albl-Mikasa 2012; Pöchhacker/Liu 2024).

The underlying research questions (Which model? What selection criteria for the many tools and technologies available? Which solutions for which settings?) were answered by presenting a workflow-based concept, offering a non-exhaustive overview of some of the main interpreting technologies currently available, with the purpose of improving or at least streamlining the typical interpreting process (before, during and after SI) both for professionals and trainees. The criteria adopted to select these tools were the fact that they met specific requirements in terms of user-friendliness, usability (multi-device, multi-platform systems), availability, accessibility (free or affordable solutions) and the functionalities offered (see Appendix, Table 5). Based on the observations conducted and the feedback provided/received in the three fields of inquiry (professional practice, academic training, and CPD) over a period of more than five years, it is possible to draw some preliminary conclusions, which will require further confirmation and experimental validation. Adopting a workflow-based model showed several advantages for both professionals and trainees. The former can use these tools and technologies to streamline a specific part of the complex pre, during and post-interpreting process. Professionals can see their usefulness immediately and realize that it is worth making an effort to learn how to use them, and integrate them into their practical daily workflow. In the case of interpreter training, the advantages of adopting a similar approach range from improving the students' experience and motivation, to maximizing their learning (Sandrelli/Hawkins 2006; Fantinuoli/Prandi 2018; Spinolo/Amato 2020; Ferreira-Vázquez/Varajão Moutinho Pereira 2023; Bertozzi 2024b; Davitti *et al.* 2025), and simulating an authentic interpreting workflow, thus providing trainees with additional resources to make use of in their future professional lives.

In answering these research questions, one common element was found to be particularly relevant in this context. In an ever-evolving scenario, where available

52 <<https://aegisub.org/>> [11/04/2025]

technologies change and progress at a very fast pace, the focus should be on the methodological approach underlying this workflow-based model, not just on the mere choice of the single tools *per se*. What has been defined as the “technological turn” (Fantinuoli 2019) makes it almost impossible to keep up with the speed of advancements and changes in new technologies, further sped up by the pervading application of AI in many different domains of knowledge. That is why it is important to rely on a sound methodological framework based on professionals’ and trainees’ specific needs and expectations, rather than to place the emphasis on the choice of a particular tool instead of another. The idea is that interpreting tools may (and will) change in the future, but a methodologically sound model will remain relevant and will remain applicable to an ever-evolving scenario where technologies might become obsolete, be updated and replaced in a relatively short time. Against this backdrop, critical thinking and (human) analytical skills must be the main resources to be taught to trainees and to be kept active among professionals, to enable them to select, test, adopt and integrate a specific tool technology into the complex SI workflow.

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Table 5: Tools and selection criteria

TOOLS AND SELECTION CRITERIA*						
General preparatory phase						
Speech-to-text from audio input						
	Perceived ease of use (PEOU)	Perceived usefulness (PU)	Free tool	Device type	Operating system	N. of functionalities (where applicable)
Integrated AI voice assistants: Google Assistant/Gemini	High	Medium	Yes	Mobile	Android	
Integrated AI voice assistants: Siri	High	Medium	Yes	Mobile, Mac	MacOS, iOS	
Google Live Transcribe (and/or Google Recorder)	High	Medium	Yes	Mobile	Android	
DIT.tafono	High	Medium	Yes	Any	Any (browser-based)	High (editing and automated functionalities)
Speech-to-text from audio/video file						
GoogleDoc + VB Audio Cable	Low	High	Yes	PC	Windows	
Youtube CC	High	Low	Yes	Any	Any	
Whisper (OpenAI)	Low	High	Yes	PC, Mac	Windows, MacOS, Linux	
Sonix	High	High	No	Any	Any	High (timecodes, speaker's recognition)
Document-based terminology-specific preparatory phase						
Sight translation of preparatory documents						
DITLab Scroller	High	High	Yes	Any	Any (browser-based)	High (font size, speed rate)
Annotating preparatory documents						
MS One Note	Medium	High	Yes (with limitations)	Any	Any (online version available)	High
Nebo	Medium	High	No	Mobile	Windows, Android, iOS	
Evernote	Medium	High	Yes (with limitations)	Any	Any (online version)	
Creating, updating, integrating collaborative glossaries						
Interplex	Medium	High	No	PC, Mac	Windows, MacOS	
SDL Multiterm	Low	Medium	No	PC	Windows	
Boothmate	High	High	Yes (with limitations)	Any	Any (browser-based)	High
Airtable	Low	Medium	Yes (with limitations)	Any	Any (browser-based)	
InterpretBank	High	High	No	PC, Mac	Windows, MacOS	High
Cymo	High	High	No	PC, Mac	Windows, MacOS	High

Memorizing terminology						
Interpreter's Help	High	High	No	PC, Mac	Windows, MacOS	High
InterpretBank	High	High	No	PC, Mac	Windows, MacOS	High
During SI						
Terminology lookup**						
Terminus	Medium	High	No	PC	Windows	High
Glossarmanager	Medium	High	Yes	PC	Windows	High
Flashterm	Medium	High	No	PC, Mobile, Mac	Windows, MacOS	High
Interplex	Medium	High	No	PC, Mobile, Mac	Windows, MacOS	High
SDL Multiterm	Low	High	No	PC	Windows	High
Airtable	Low	High	Yes (with limitations)	Any	Any (browser-based)	
Boothmate	High	High	Yes (with limitations)	Any	Any (browser-based)	High
ASR applications						
Zoom CC	High	Medium	No	PC, Mobile, Mac	Windows, MacOS	
InterpretBank AI Pad	High	Medium	Yes	Any	Any (browser-based)	High (handwriting functions, machine translation)
Sight Terp	High	High	Yes (with limitations)	Any	Any (browser-based)	
RSI platforms integrating ASR: Kudo	High	High	No	PC, Mobile, Mac	Windows, MacOS	
RSI platforms integrating ASR: Interprefy	High	High	No	Any	Any (browser-based)	
Integrated CAI tools						
Interpreters' Help	Medium	High	No	PC, Mac	Windows, MacOS	High
InterpretBank	Medium	High	No	PC, Mobile, Mac	Windows, MacOS	High
Cymo Note	High	High	No	PC, Mac	Windows, MacOS	High
After SI						
Portfolio creation						
Noteshelf	Medium	Medium	Yes (with limitations)	PC, Mobile, Mac	Windows, MacOS	
Recording and self-monitoring						
Audacity	High	Medium	Yes	PC, Mac	Windows, MacOS	
Recordscreen.io	High	Medium	Yes	Any	Any (browser-based)	
Televic InterpreterQ Media Player	Medium	High	Yes	PC	Windows	High
Extra linguistic services after the assignment						

For transcription: Zoom CC	High	Medium	No	PC, Mobile, Mac	Windows, MacOS	
For transcription: VB Cable + GDoc	Low	Medium	Yes	PC	Windows	
For transcription: Sonix	High	High	No	Any	Any (browser-based)	High
For minutes drafting: Webex Assistant	Medium	Medium	No	PC, Mobile, Mac	Windows, MacOS	
For minutes drafting: Fathom	Medium	High	Yes (with limitations)	PC, Mac	Windows, MacOS	
For subtitles creation: Aegisub	Medium	Medium	Yes	PC, Mac	Windows, MacOS	

*This table represents a snapshot of the features of these tools at the time of writing and is by no means intended as an objective evaluation. It is the result of the author's subjective experience, supplemented by feedback received from three types of stakeholders across the three case studies presented in this paper. This table has been divided into sub-functions according to the use case scenario and workflow (before, during, and after the interpretation).

**Only tools exclusively dedicated to terminology management have been included here. A separate section has been devoted to integrated CAI tools.