Using Modern Simultaneous Interpretation Tools in the Training of Interpreters at Universities

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Abstract. The article considers the issues of improving the training of future interpreters in the aspect of the formation of the corresponding simultaneous translation competencies taking into account the possibilities of using modern tools. A comparative analysis of traditional and modern simultaneous translation technologies has been carried out. It focuses on the advantages of Remote Simultaneous Interpreting (RSI) and Computer-assisted interpreting (CAI) tools for simultaneous interpretation, and the feasibility of studying them is substantiated. The factors limiting their application are considered, and the elements of educational technologies aimed at their elimination are proposed. A scheme for the practical training of interpreters in the conditions of a simultaneous translation laboratory is developed, in which the conditions for simultaneous translation are modeled within the framework of various formats of interpersonal foreign language communication. The motivation of students to study modern simultaneous translation tools was diagnosed. Changes to the content of professionally oriented disciplines of the curriculum for the training of interpreters are proposed, in the aspect of introducing the theoretical and practical component of mastering modern simultaneous translation tools.

Keywords: Simultaneous Interpretation Tools, Remote Simultaneous Interpreting, Computer-assisted Interpreting, Training of Interpreters.

1 Introduction

1.1 The problem statement

The professional training of translators and interpreters in modern conditions implies the formation of a set of competences that will allow you to perform professional tasks in the field of scientific and technical translation and translation of conferences. The EMT Competence Framework [1] defines the list of such competences. Particular attention is paid to technological competence, which involves mastering modern technologies and tools when performing translation activities. However, it should be noted that the content of this competence is concentrated mainly on the technological level of translation [1, p.9]. Moreover, this is not surprising, as there are two major technologies

used today in the field, automated and machine translation, which are being developed in parallel and there are many tools to implement them. With regard to interpreting, including simultaneous interpreting, the content of technological competence does not in fact regulate specific knowledge and skills, especially in terms of the use of modern IT-based tools and technologies. This is because simultaneous interpretation is traditionally understood as a type of activity, the key aspect of which is language proficiency, the ability to simultaneously perceive speech and produce its translation, using technical means for receiving and reproducing an acoustic signal.

The main purpose of the article is to investigate the possibilities of introducing the study of modern simultaneous interpreting tools into translators' training programs at universities, taking into account traditional and modern simultaneous interpreting technologies. It will allow to develop the scheme of practical training of translators in the laboratory of simultaneous interpreting, which simulated the conditions of simultaneous interpreting within different formats of interpersonal foreign language communication. The hypothesis of our study was as follows: Do students support the introduction of new simultaneous interpretation technologies in their training program?

To achieve this purpose, a number of methods are used. We used comparative analysis to compare the traditional and modern simultaneous interpreting technologies. Modeling has become a means for reproduction of real-world conditions and situations of simultaneous interpreting in the educational process. Questioning provided interviewing students to obtain information about their attitude to the problem of research and motivation to study of modern tools of simultaneous interpreting. The generalization included formulation of conclusions, suggestions, and recommendations based on the data of the conducted research.

1.2 Literature Review

Scientists traditionally believe that the effectiveness of simultaneous translation is influenced by both language knowledge and knowledge of non-linguistic factors, namely non-verbal expressions and gestures that can be observed by the translator during a translation session. E. Conway is of the opinion that the use of a computer in the simultaneous interpreter's booth during the traditional simultaneous interpretation process is limited. Since simultaneous interpreters are mostly underutilized during their simultaneous interpreting with their capacities for listening, understanding, buffering, producing, checking and coordinating all activities, the computer can only be used to a limited extent during the interpreting [2].

However, in recent years, new technologies have been intensely integrated into the work of simultaneous interpreters, with increasing attention from foreign scientists. C. Silva provides a basic overview of webcast interpreting, noting, "The most webcast interpreting events today take advantage of audio and video technologies, allowing interpreters to take in as many audio and visual cues as possible" [3]. The researcher believes that one of the important advantages of webcast interpreting is the ability to obtain visual information, in particular, to observe the body language of the speaker, which helps to improve interpretation.

The most common modern simultaneous interpreting technologies include Remote Simultaneous Interpreting (RSI) and Computer-assisted interpreting (CAI).

K. Ziegler and S. Gigliobianco emphasize the importance of new technological approaches to remote simultaneous conference interpreting [4]. M. Dziabala points out that the "true" remote interpreting (RI) is defined in the ISO standard 20108, namely as interpreting of a speaker in a different location from that of the interpreter, enabled by information and communications technology. With the RI or RSI, it is not just a matter of the spatial separation of the speaker and the interpreter, but also of the fact that information technologies are used. The spoken word, the video recordings of current events and possibly other video material of the customer are forwarded to the interpreters via an internal server system or a cloud-based solution. Interpreting reaches the audience in the same way [5].

H. Pielmeier defines three modules of the nascent CAI category provided for helping interpreters: prepare for interpreting assignments, assist during the delivery of interpreting assignments, and support processing post-assignment information [6]. However, despite the large offer of various translation and interpreting software products, including simultaneous interpreting, virtually all of them focus primarily on supporting the interpreting preparation process. In particular, there are a number of computer programs that can be used to list terminology and subsequently search for it during interpreting. However, as noted by P. Sand, most professional programs designed for translators are too complex and detailed to use in interpreter's booth. Instead, the researcher proposes to use the Interplex program, which includes searching in many glossaries, emphasizing the speed of the search [7].

Given the rapid spread of new simultaneous interpreting technologies, it is worthwhile to prepare translators for their application while studying at the university. Some foreign scientists have already made such attempts. For example, B. Prandi conducted a pilot project at the University of Bologna on the Use of CAI Tools in Interpreters' Training. The study suggested that: "There is reason to believe that the tool will be a useful addition to the curriculum of trainee interpreters, yet more empirical studies are needed to test and possibly improve the way it can be integrated with current interpreter training approaches" [8, p.56]. We also offer the use of cloud-based translation systems in the process of teaching translators at universities [9].

Such studies have not yet been conducted in Ukrainian universities, so we consider it expedient to explore the possibility of introducing the study of systems and tools of simultaneous interpretation into curricula for translators.

2 Result and Discussion

2.1 Comparison of traditional and latest simultaneous interpretation technologies

Traditional simultaneous interpretation technology involves the transmission of the content of a speaker to a foreign language audience of the target language where the interpreter acts as an intermediary. All participants in this process are simultaneously within the same premises. To organize the interaction between them it is necessary to have a complex of specialized equipment. The main attention is paid to the activities of the interpreter, and therefore to the creation of appropriate conditions for his work.

First, this involves having an isolated workplace in the form of a special booth, receiving high-quality audio and video from the speaker's workplace, conveniently managing the content channel in the target language, providing speaker and target audience observation, and more. The importance of an approach to organizing an interpreter's work is evidenced by a number of updated international standards that govern a significant number of requirements and parameters for such work. In particular, these are ISO 2603: 2016 "Simultaneous interpreting – Permanent booths – Requirements" [10], ISO 4043: 2016 "Simultaneous interpreting – Mobile booths – Requirements" [11], ISO 20108: 2017 "Simultaneous interpreting – Quality and transmission of sound and image input – Requirements" [12], ISO 20109: 2016 "Simultaneous interpreting – Equipment – Requirements" [13].

An integral part of the traditional simultaneous interpretation technology is the listener's equipment for receiving translation in the target language. Typically, infrared receivers equipped with headphones are used as such equipment. In this case, the audio signal from the interpreter's booth is fed to an infrared emitter, which ensures its transmission to any point in the room to be received by a participant who needs foreign language content and uses the corresponding receiver.

However, despite the widespread use of the traditional simultaneous interpretation technology, there are a number of new technologies and tools available today that allow for qualitative changes both in the organization of this type of translation activity and in the activity of the interpreter in terms of her/his information support. Of course, first, such technologies are based on the use of Internet services, cloud platforms and specialized software products.

RSI is one of the technologies that can change the way an interpreter interacts with a speaker and a foreign target audience. Its peculiarity is that interpreters can perform simultaneous interpretation while outside the event. In this case, using a special cloud platform, the interpreter receives, through the network, high-quality audio output and video from the report site, which are played respectively by the speaker system and on the monitor screen. For example, laptops, Wi-Fi internet, a headset, and built-in laptops can be used as technical support. The performed interpretation, in turn, is transmitted by the network means to the receivers, which are connected to the same platform and are in the target language consumers. As receivers can be used smartphones that are connected to the Internet and have a software application that provides access to the appropriate platform.

RSI technology enables simultaneous interpretation to be organized at events of various formats, including Conferences, Panel discussions, Online meetings and webinars, Seminars, Small meetings and so on. Despite the fact that such technology actually emerged only a few years ago, its popularity is growing rapidly. This is evidenced by data on the increase in the financial turnover of language companies, the development of new platforms, including start-ups. It is also significant that RSI technology has attracted the attention of the European Commission's Directorate-General for Translation (DG SCIC), which, based on the results of the testing, recommended the use of a remote translation platform when providing simultaneous interpretation services. In addition, the potentialities and benefits of this technology led to the launch of the ISO Working Group on the development of specific standards for its application [14].

The use of such simultaneous translation technology has several significant advantages over traditional, in particular:

– reduction of costs for the organization and provision of simultaneous interpretation (there is no need to pay the rent of expensive equipment to ensure the work of interpreters, devices for listeners, as well as travel and accommodation of interpreters),

– increasing the mobility of events organization (the opportunity to organize an event with the offer of interpretation into several languages in the shortest possible time due to the absence of the need to find interpreters at the venue and search, rent and transport equipment),

– ensuring a high level of translation (achieved through the possibility of attracting highly qualified translators, who can be anywhere in the world),

– greater availability of equipment (own PCs and mobile devices are used),

– expansion of the event audience (more listeners in the hall are covered by the use of their own devices and by remote connection of participants),

– possibility of holding an event in places with limited communication (ensuring the involvement of interpreters and part of the participants without their presence).

Despite the innovative nature of this technology there are a number of risks that may limit its application. These include:

– technical failure,

– quality of communication impaired,

– RSI deployed in unsuitable settings [15].

As noted, this technology is primarily based on the use of a specialized platform. Among the platforms currently used to implement this technology, we should mention Interprefy, KUDO, Interactio, VoiceBoxer, Tolkvox, Speakus. Some of these platforms can also integrate with teleconferencing products such as Skype, WebEx, and Zoom.

Innovative technologies in simultaneous interpretation should also include the use of CAI in this process. Such systems are currently implemented in the form of specialized software and are aimed at providing lexical and terminological support for interpreters at various stages of simultaneous interpretation. In particular, systems such as InterpretBank, Interplex, Interpreters' Help, Intragloss, LookUp, etc. are widely used today. Their main advantage is providing real-time access to terminology databases. When a term request is made, the system automatically analyzes its presence in the connected databases and offers matching options in the specified target language, displaying the results on the monitor screen. In this way, the interpreter is able to receive support in the form of a visual representation of the translation of a term. However, a major problem with the implementation of such systems is the need for the interpreter to manually enter a term or part of it. It takes a considerable amount of time and distracts the interpreter from searching for terminological data at a time when it requires concentration and rapid perception of information [16].

As a major step towards addressing this shortcoming, CAI systems are offered in conjunction with Automatic Speech Recognition (ASR) as a form of query automation technology. In this case, the ASR can be an effective tool not only for identifying terms in the original language and for automating the process of querying them in terminological databases without the assistance of an interpreter. It can also help to expand the

range of possible functions, in particular, facilitating the processing and interpretation of such data as numbers, abbreviations, acronyms, proper names, and more. However, to be successfully integrated into the interpreter's work environment, ASR systems, like CAI, must meet a number of criteria. For example, ASRs should be independent of the speaker's speech features, have a short reaction time, and ensure the accuracy of recognition of specialized vocabulary [16]. Systems such as Dragon Naturally Speaking, Bing Speech APIs and others can be used to provide automatic language recognition features in the implementation of simultaneous interpretation technologies.

2.2 Development of a special laboratory for the study of simultaneous interpretation technologies

The urgent requirement of time is to include in the content of training translators the study of latest technologies, in order to form readiness for their use in the process of professional activity in the simultaneous interpretation. The practical implementation of this goal is advisable to carry out in a specialized laboratory. Training workplaces in such a laboratory should ensure that the various roles of participants in the event where simultaneous interpretation is provided are fulfilled. It should be envisaged to simulate the implementation of such an event using the above mentioned technologies, both individually and in combination. Our scheme of such specialized laboratory of simultaneous interpretation is developed in Figure 1.

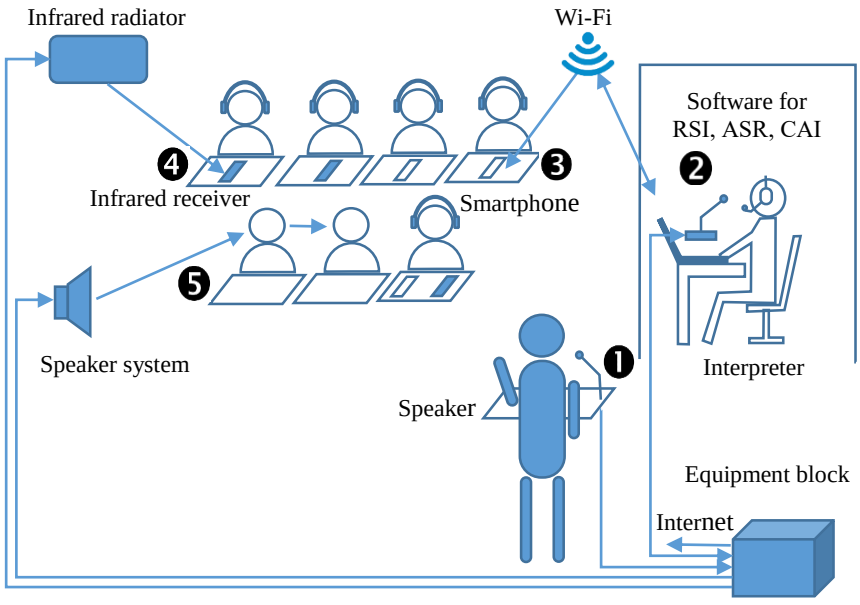

Fig. 1. Scheme of a specialized laboratory for simultaneous interpretation.

Workplace 1 is designed to develop the speaker's skills in a foreign language, the location of which may be behind a rostrum with a stationary microphone, or within any point of the front zone using a radio microphone. This workplace involves developing a student's foreign language skills, articulating, pausing, and intonation of speech. However, the main task of the student in this workplace is to imitate her/his report, depending on the task of the teacher: at different rates, with different intonation, using non-verbal means, with presentation, etc. All of this is aimed at modeling real-life situations for a student who is working on an interpreter function. Also important here is the reproduction of the speaker's functions in situations where the visual perception of the interpreter occurs through the monitor screen during the video broadcast of the speech.

At the same time, working on this training workplace helps to prepare the student for understanding the possible nuances of the speaker's behavior and the peculiarities of their speech. The equipment of this location includes a microphone and camcorder, which will generate the audio signal of the original speech and video signal of the speaker's seat. These devices shall be capable of transmitting these signals both to the desk of interpreter in the booth using traditional fixed equipment and to the cloud platform using the Internet.

Workplace 2 is designed to work as an interpreter. The peculiarity of this workplace is that it is organized within a permanent interpreter's booth, which must comply with ISO 2603: 2016 [9]. Depending on the subject of the classes, the student develops the skills of simultaneous translation with the use of different technologies. In particular, in the case of traditional technology, the work of the student in the laboratory at this place should be aimed at acquiring technical skills of working with the desk of interpreter, the skills of simultaneous interpretation with the perception of speech through headphones and reliance on the visual perception of the speaker, adaptation to the conditions of work in a confined space.

If the task of the laboratory work is to perform simultaneous using Remote Simultaneous Interpreting technology, then the preparation of this workplace requires changes in the equipment and organization of work. In particular, a laptop with the feasibility to connect via a high-speed network channel to a cloud-based remote interpretation platform should be used as the primary equipment. An integral part of the kit in this case is also the headset. Organizational training activities should ensure that the workplace of the interpreter is visually isolated from the audience. Visual isolation is created to simulate the placement of an interpreter outside of a simultaneous interpretation event. Under these conditions, the skills of remote simultaneous interpretation are honed, namely the skills of working with a cloud-based remote interpretation platform, the skill of simultaneous interpretation with the reception of audio signal broadcasting over the Internet and its perception through headphones and reliance on the video presentation of the speaker on the screen.

In the framework of a separate laboratory work, the traditional scheme of interaction of the main participants of the process should be implemented in order to perfect the skills of simultaneous interpretation using Computer-assisted interpreting technology. As a technical equipment, it is necessary to use both a permanent interpreter's desk with connected headphones and a laptop with the Computer-assisted interpreting system installed. This system with terminology bases connected provides terminological support

for the synchronous translation process. However, the use of this system requires a separate set of skills. The purpose of the student's work at this workplace is to form them. In particular, skills of launching the CAI system and its integration into the interpreter's working environment, connection of specially prepared terminological bases, interpretation with terminological support by means of CAI, etc. are formed. In addition, the technical skills of interpreter control are improved, the skills of foreign language perception through headphones for the purpose of simultaneous interpretation, the ability to divide attention between hearing, speaking and searching and use of the CAI help resource.

To improve computer-assisted interpreting skills using the Computer-assisted interpreting technology, the following laboratory work is performed in the interpreter's workplace, which additionally includes the acquisition of Automatic Speech Recognition. The peculiarity of this work is to strengthen the role of the CAI system during simultaneous interpretation and to increase its level of use. It is achieved by using the ASR system by converting the speaker's oral speech into a symbolic representation of the text. This, in turn, automates the process of identifying terms in a report and finding their matches in databases by displaying results in the structure of the CAI window. It also individually visualizes the numerical data and proper names used by the speaker, which eliminates the need for the interpreter to memorize them. In addition, although the consistent presentation of content as it is reported in symbolic representation by the means of the CAI interface does not provide instantaneous receipt of complete content; however, it significantly increases the effectiveness of its perception. Thus, performing this lab work, the future interpreter will first acquire the skills of working with the CAI system in conjunction with the ASR system. He develops skills of simultaneous interpretation with the ability to perceive from the monitor screen in the interface of CAI the numerical, terminological and full text information of the speech received by the means of ASR and with the support of visual observing with the speaker and the audience.

The components of the general scheme of laboratory work on the development of different technologies of simultaneous interpretation are workplaces 3 and 4, which are designed to simulate the role of listeners. The importance of these jobs in the scheme of each lab work is first and foremost due to the fact that the translator, in addition to the essence of the interpretation process, must also understand the peculiarities of the translation to the listener, the perception of its content and the impact on it of the individual speaking style of the translator, etc. In addition, student engagement in the workplace facilitates the student's understanding of the integrity of the process of speech production, translation, and perception.

However, the laboratory provides two types of listener workplaces that differ in technical equipment and range of tasks performed, depending on the technology being honed. In particular, workplace 3 is designed to test RSI technology. To this end, the student should have a smartphone and headphones, and a Wi-Fi hotspot should be functioning in the lab. Smartphone features must allow to download the Cloud Remote Platform (RSI) App from Google Play or the App Store. This set of hardware and software will allow the student to connect to the channel on which the translation is broadcast in the desired language and listen to it for further tasks. Thus, this workplace develops the

skills of using a smartphone to work with a cloud-based remote translation platform, in particular, downloading, configuring and using it to get a translation in a specific language to form their own opinion on the problem of the report. At the final stage of the work, the student must express her/his opinion in the source language.

Another type of student workplace is provided under number 4, which is planned to test three other synchronous interpretation technologies, including traditional, using the CAI technology and using a combination of CAI and ASR. The main equipment of this place is the infrared receiver, which should include headphones. The operation of this equipment necessarily requires the presence of infrared emitters, which must be able to transmit the signal to the listening devices. When mastering any of these three technologies in this workplace, the primary goal is to develop the student's skills in using the appropriate equipment to listen to the translation in the desired language; active listening, which may be accompanied by a record of key terms on the issue of the report, its annotated content, notes to further formulate questions on the issue of the speech.

In the list of laboratory jobs, workplace number 5 is ancillary, although it is aimed at practicing one type of interpretation ("whispered interpreting"), but is not a necessary component in the scheme of interaction of participants of the simultaneous interpretation process by any of the above technologies and not related to the use of special equipment. However, the presence of other workplaces additionally makes it possible to simulate realistic conditions for the translation of "whispered interpreting" at this workplace.

The presence of a specialized laboratory for simultaneous interpretation, the scheme of which is presented in Figure 1, with the above workplaces and equipment allows to form a number of competences of the simultaneous interpreter in the process of performing a complex of laboratory work. Issues of laboratory works with a focus on a specific technology, a list of workplaces filled with the necessary equipment, the components of competencies, on the formation of which the work of students in the specified places is oriented and the defined roles are given in Table 1.

Table 1. Structural elements complex of the process of studying simultaneous interpretation technologies in a specialized laboratory.

Issues of laboratory works	**Workplaces**	**Equipment**	**Roles of students**	**Elements of competencies that are formed**
Simultaneous interpretation using traditional technology	1	Radio microphone	Speaker	Foreign language skills without text support; extralinguistic skills; skills to answer questions
	2	Permanent booth, interpreter's desk, headphones	Interpreter	Technical skills of working with the interpreter's desk; simultaneous interpreting skills with headphone and visual perception of speaker and audience

	4	Infrared receiver, headphones	Conferee	Listening skills; skills in formulating and asking questions about the issue of speaking in the source language
	5	External speaker system	Interpreter	Translation skills of "whispered interpreting"
Simultaneous interpretation using Remote Simultaneous Interpreting (RSI) technology	1	Microphone and webcam for signaling to a cloud remote interpretation (RSI) platform	Speaker	Foreign language skills with regard to video broadcasting speech; skills to control the use of extralinguistic means to minimize them
	2	Permanent booth with isolation of visual contact with the audience, high-speed Internet access channel, laptop with cloud-based remote interpretation (RSI) connection and built-in camcorder, headphones	Interpreter	Skills of working with the cloud platform of remote translation; simultaneous interpretation skills with receiving audio signal over the Internet and receiving it through headphones and relying on video images of the speaker's speech on the monitor screen
	3	Smartphone with downloadable RSI from Google Play or App Store, Wi Fi hotspot, headphones	Conferee	Skills of downloading a cloud platform remote translation application on a smartphone; skills of setting up an application to receive translation in a specific language; listening skills, with a brief expression of the student's own opinion on the problem of reporting in the source language
Simultaneous interpretation using Computer-assisted interpreting (CAI)	1	Stationary microphone on the podium, remote control projector	Speaker	Foreign language skills with text support; reasoning skills; presentation skills
	2	Permanent booth, interpreter's desk, headphones, laptop with Computer-assisted interpreting (CAI) installed	Interpreter	Technical skills of working with the interpreter's desk; computer-assisted interpreting skills; simultaneous interpretation skills with headphone perception, CAI terminological support, and visual observation of the speaker and audience

	4	Infrared receiver, headphones	Conferee	Listening skills; annotation skills for summarizing the content of the report
	5	External speaker system	Interpreter	Translation skills of "whispered interpreting"
Simultaneous interpretation using Computer-assisted interpreting and Automatic Speech Recognition (CAI, ASR) technologies	1	Stationary microphone on the podium	Speaker	Speaking, pausing, and intonation skills
	2	Permanent booth, interpreter's desk, headphones, laptop with Computer-assisted interpreting (CAI) and Automatic Speech Recognition (ASR) installed	Interpreter	Technical skills of working with the interpreter's desk; computer-assisted interpreting skills in conjunction with Automatic Speech Recognition; simultaneous interpretation skills with the perception of speech through headphones, ability to visual perception of terminological information from the monitor screen in the interface of CAI, and of the text in the interface of ASR and with visual observation of the speaker and audience
	4	Infrared receiver, headphones	Conferee	Active listening skills with writing key terms of the report
	5	External speaker system	Interpreter	Translation skills of "whispered interpreting"

2.3 Analysis of a student survey on their motivation to study the latest simultaneous interpretation technologies

Due to the importance of studying these simultaneous interpretation technologies, appropriate changes have been made in the content of translators' training. In particular, the module "Innovative Simultaneous Interpretation Technologies" was included in the structure of the course "Practical Course of Interpreting and Translating". Within this framework, the latest synchronous interpretation technologies, features of the translator's activity in terms of their application, technical equipment and software of this type of translation, specific interaction of the main participants of the process, etc. were introduced to students. An experimental study was conducted for two years. According to the results of the module study, students were offered a questionnaire, which provided an indication of their motivation to study modern tools of simultaneous translation, level of awareness of the use of information technology in the implementation of simultaneous interpretation. 34 students answered the questionnaire. The content of the questions and the results of the questionnaire are shown in Table 2.

Table 2. Content of questions and results of students' questionnaire about their motivation and awareness about the use of information technologies in simultaneous interpretation.

№	Content of questions	Answer options, %	
		Yes	No
1	Do you think that in the future you will be able to work as a simultaneous interpreter?	47,1	52,9
2	Is it necessary to change the approach to simultaneous interpretation from the traditional one, where the translator relies solely on their knowledge and experience?	76,5	23,5
3	In your opinion, will information technology help the interpreter to translate qualitatively?	73,5	26,5
4	Will you use the technology modules learned in your future professional career?	67,6	32,4
5	Do you see the prospect of implementing RSI technology in simultaneous interpretation?	82,4	17,6
6	Does a simultaneous interpreter need terminological support using CAI technology?	52,9	47,1
7	Does the use of CAI technology require prior preparation for simultaneous interpretation?	88,2	11,8
8	Do you think that practical training in the use of modern synchronous interpretation technologies in a specialized laboratory is appropriate?	97,1	2,9
9	Is the scope of the module sufficient for the study of key aspects of modern synchronous interpretation technologies?	79,4	20,6
10	Are you ready to make additional efforts to deeper study modern simultaneous interpretation technologies?	70,6	29,4

Analysing the results of the questionnaire, it can be noted that, overall, students positively assess the likelihood of their future activities as a simultaneous interpreter, as indicated by 47.1% of respondents in the answer to the first question. Such an indicator is quite high for this highly specialized translation activity. This has largely identified a large number of positive options for answering the following questionnaires, including two, three, and four.

However, the answers to the questionnaire regarding the prospects and features of the application of specific technologies, which they were introduced to in the course of studying the module, indicate the ambiguity of students' perceptions of their advantages and disadvantages. In particular, students are more likely to see the use of RSI technology than the CAI, as evidenced by the difference in the percentages of positive answers to questions five and six. This is most likely due to the fact that CAI technology proved to be quite difficult for them to study because it required not only simultaneous concentration on several aspects of the simultaneous interpretation process, but also preparation of the system for its use, as noted by students in answer to questions seven.

Of course, the answers to question eight were logical, since confidence in the use of the latest simultaneous interpretation technologies can only be obtained through sufficient practical training in their application, which can only be achieved in a specialized

laboratory. A high percentage of positive answers to question nine (79.4%) indicates that the content of the module is quite successful. However, this number may be somewhat biased, as students do not yet have any experience in simultaneous interpretation, and thus it is difficult for them to evaluate the required amount of study material. Unexpectedly high was the number of negative answers to question ten (29.4%), probably because students overestimated their level of readiness to use the latest technologies in the implementation of simultaneous interpretation after studying the module.

3 Conclusions

Given the rapid expansion of the use of modern information technologies in the field of simultaneous interpretation, it is advisable to make appropriate changes to the professional training of translators. In particular, this can be done by introducing the module "Innovative Synchronous Translation Technologies", which should include the study of Remote Simultaneous Interpreting and Computer-Assisted Interpreting. The study of these technologies is possible through the creation of a specialized laboratory for simultaneous interpretation with the appropriate set of technical equipment and software. Conducting a complex of laboratory work in such a laboratory should ensure the formation of a number of skills necessary for the professional work of a modern simultaneous interpreter. To this purpose, we developed a scheme for such a laboratory for its implementation in the educational process of training interpreters and tested it. In particular, these are the skills of working with a cloud-based remote translation platform; synchronous interpretation skills with the reception of audio signal broadcasting over the Internet and its perception through headphones and reliance on the video image of the speaker's speech on the monitor screen; technical skills of working with the interpreter's desk; computer-assisted interpreting skills in conjunction with Automatic Speech Recognition; simultaneous interpretation skills with the perception of speech through headphones, ability to visual perception of terminological information from the monitor screen in the interface of CAI, and of the text in the interface of ASR and with visual observation of the speaker and audience.

The conducted questionnaire of students has shown their interest in the future employment in the field of simultaneous interpretation, understanding of prospects of application of modern technologies of simultaneous interpretation, desire to study them and readiness to make additional efforts for this study.

Further scientific research may be related to the improvement of the methodology for the comprehensive study of the latest technologies and simultaneous translation tools during university training of translators. Another area of research may be the optimization of the list of software products within technologies on which it is advisable to base their study. It is also important to investigate students' motivation to study the latest simultaneous translation technologies.

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