Applied modern digital technologies in teaching special texts written translation.

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Abstract. To master the course on translation of special texts, the student must first successfully complete the study of such disciplines as Abstracting and annotating the text of the first foreign language, a practical course in translation of the first foreign language, Theory of intercultural communication, a practical course in the first foreign language, Lexicology. However, in modern society, during the period of digitalization, a student needs to own digital tools in his future professional field. In this regard, a mandatory course or module in the training of translators will have to be the Basics of digital technologies in linguistics. This course is aimed at mastering students' basic translation and language communication skills using smart tools and CAT systems in the translation process.

1 Introduction

Due to the modern requirements in the professional translation environment, in addition to the basic initial skills of written translation of text, in particular, scientific and technical literature, normative and technical documentation and other types of special texts, it is also necessary to master special software products and digital technologies - the main and auxiliary tools for professional translators.

They include the use of end-to-end technologies, including software products based on artificial intelligence, which facilitate the rapid processing of information and its transfer to any devices and shared cloud storage [1].

The course should be done the way that by the end of it students should know:

- the basics of pre-translation analysis of a written text that contributes to an adequate perception of the original utterance;
- the basic methodology for identifying inconsistencies in the translation process and ways to overcome them;
- all kinds of lexical, grammatical and syntactic transformations;
- the methodology of post-translation analysis of the translated text and all stages of editing the text of the written translation;

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the most significant models of written intercultural communication and its most important content and structural components;
- basic principles of adaptation to new business conditions, fundamentals of translation software;
- the methodology of preparing for translation in special areas; the main types and genres of special texts.

Students should be able to:
- analyse the structure and semantic architectonics of the text as a whole;
- segment text into translation units; apply basic translation transformations to achieve equivalence and representativeness in translation;
- carry out post-translation editing of texts, carry out written translation in special areas in compliance with grammatical, lexical, syntactic and stylistic norms, using Internet resources, terminological dictionaries, and other reference materials;
- use Internet technologies and software products for professional translation;
- create terminological databases using cloud storage, as well as ensure their functioning using computer data processing, including AI-based software.

Students should master:
- technical translation actions (techniques) that ensure maximum achievement of a communicative effect;
- analysis and correction and editing of the translation text; the ability to identify and eliminate the causes of miscommunication in specific situations of intercultural interaction;
- the ability to adapt to new activities and conditions;
- the ability to use end-to-end technologies, Internet technologies and machine learning in the professional field;
- the skill of working with professional AI-based products [2].

### 2 Research methods

Software products used in translation industry, should be delivered to the students during the practical classes. With 232 academic hours of practical work on the course 46 of this should be actualised to particular digital studies.

The curriculum planned classes may include such topics as:

**Topic 1**
- Terminological glossaries. Typology, classification and methodological setting of glossaries. The use of digital technologies in the compilation of terminology databases.

**Topic 2**
- The use of online dictionaries, online translators and other AI technologies in translation.
- Professional translation programs based on translation memory technology.

The self-study may include the following topics:

**Topic 1**
- Consolidation of the studied material on the topic: Terminological glossaries. Typology, classification and methodological setting of glossaries. The use of digital technologies in the compilation of terminology databases.

**Topic 2**
- Consolidation of the studied material on the topic: The use of online dictionaries, online translators and other AI technologies in translation. Professional translation programs based on translation memory technology.
Consolidation of the studied material on the topic: Types of scientific and educational texts. Annotation and abstracting of scientific articles. Application of AI-based software for text processing

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The following program-based methods will form the digital competencies of the graduate:

- Translation of texts using translation memory systems (Trados, MemoQ, Memsource, SmartCAT) [3].
- Creation of terminology databases (MultiTerm).
- The use of text processing programs based on neural networks (“Rewriter” and “Summarizer” from Sber).
- The use of software products, including AI-based ones, for solving professional tasks and their integration with other software products (for example, speech recognition using Speechpad - https://speechpad.ru / - Fig.1).

![Fig. 1. A screenshot of Speechpad implementing into SDL Tados (the contents is an example).](image)

As Figure 1 shows we introduced a new method of applying oral speech recognition tool into a regular computer assisted translation program, based on translation memory. SDL Trados Studio has been widely used by translators all over the world. Being a compulsory course for students it is necessary though to add new digital elements even into such long used programs. It is also useful to make students see the necessity to upgrade the working process or to renew and simplify their actions with the help of modern technologies and digital tools. Thus, we introduced a new action to eliminate the process of typing a text. By opening Speechpad in a separate window we can easily pronounce the translation. The program will convert the oral speech into written one and with combination of Ctrl and V hot keys we insert the complete text of our translation in each segment of Trados project. This example not only simplifies the translation process and saves time, but also teaches students to use modern programs and digital tools in many other aspects of their future work.

3 Conclusion

Summarising the digital tools used in the educational process of translation teaching it is vital to mention some activities that would help students obtain the necessary proficiencies. Among them there should be:

1. Doing practical work through the Padlet board, Miro – these tools would help students to work as a team in on-line format. With this tool they are able to fulfil projects and exchange ideas on one board even if it is a figure, a table or a chart and etc.
2. Doing practical work through the Moodle platform (https://do.skif.donstu.ru/
https://do.rsue.ru/course/view.php?id=1938). This is an example of on-line platform?
That we have in our university. That kind of platforms now has any university. But not all
the students and teachers use it in a wide sense. Such platform should be used to place and
control on-line courses, tests, practical tasks with feedback from teachers and students.

3. Discussions using programs for organizing conference calls Contour Talk

Dictionary)

To motivate students to study the variety of CAT-tools and their functions the exam
tasks should be as follows:

Translate the given text from English into Russian and make a complete linguistic
translation analysis.

Translate the text of one of the studied genres of writing from English into Russian (500
words) using the SDL TRADOS STUDIO and an alternative program - SmartCAT, MemoQ, Memsource. Make a linguistic and translational analysis of translated text.

Another useful task both for practical classes and for self-study is a case-study. Cases
should include teamwork, so that students have different roles while working on the project:

Let’s take as an example the case on Translation editing:

The idea is to solve the problem of eliminating semantic, lexical, grammatical and
syntactic errors in translation.

The purpose is to create a high-quality adequate and equivalent translation, to obtain
skills to work with information data and analytics data, to apply digital technologies [4].

Tools to be used are editor - Verifika, post-processing of text - TransTools, output of the
finished project - Miro, Padlet.

Online resources to be studied and used in class and at home:

Abby Lingvo, Multilex, Polyglossum, Context 7.0, Elsevier
www.babylon.com – Babylon
www.allwords.com – Context
www.lingvo.ru – Lingvo ABBYY
www.panvasoft.com/eng/10796 - WinLexic Microsoft Glossaries 2005
www.un-interpreters.org/glossaries.html
www.multilex.ru/online.html
www.yourdictionary.com,
m-translate.ru
https://speechpad.ru/
https://www.translatortools.net/
Deepl.com
https://e-verifika.com/

Thus, we may conclude that while working with platforms or digital tools in translation
students should be taught to master new technologies, develop new ways of data processing
and create clear action algorithms that they would successfully use in their future
professional work.

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