



TEACHING SKILLS IN THE AREA OF TERMINOLOGY AND TERMINOGRAPHIC MODELLING VIA E- LEARNING AS PART OF TRANSLATOR TRAINING PROGRAMMES

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***Abstract:** The increasing importance of translation training in academic programmes, arising from the growing requirements of the modern translation market with respect to translator skills and competences, renders it necessary to include elements of terminology and terminographic modelling in the study curricula. Rapid development of computer software provides numerous opportunities in this respect. The authors of the study present a methodological concept for teaching basics of terminographic modelling through self-study with the use of commonly available e-learning infrastructure (Moodle) and computer-assisted translation tools (memoQ). Conclusions provide guidance for the implementation of terminology and terminography in academic programmes and open avenues for further development in this area.*

Keywords: terminology, e-learning, computer-assisted translation, translator training.

INTRODUCTION

Teaching translation is, no doubt, one of the most popular and robust areas of applied linguistics at the moment. The rapid growth of the global translation market, ever faster development of new translation technologies and continuous specialisation in almost all professions and disciplines put a considerable amount of pressure on

universities to furnish up-to-date, comprehensive translation programmes as part of their study curricula. That is, by no means, an easy task given the abundance of requirements and expectations of the modern marketplace. The issue is further complicated by the multitude of competences which contemporary translators are expected to wield including, among others, linguistic skills, cultural awareness, information mining ability, communicative competence, social and interpersonal proficiency, computer skills, textual competence and knowledge of a particular industry which is necessary for translating languages for special purposes (LSP). The above requirements stem directly from worldwide industry standards such as ISO norms or ASTM guidelines (cf. ISO 17100 Translation services — Requirements for translation services, F2575-06 ASTM Standard guide for quality assurance in translation, GB/T 19363 1-2003 Specification for translation service — Part 1 Translation (National Standard of the People's Republic of China), EN 15038:2006 Translation services — Service requirements and more) and have, to a large extent, made their way into the study outcomes established under the Bologna Process. Among the various skills and abilities which need to be conveyed to future translators and interpreters are, however, also such competences which cannot be straightforwardly aligned with any classification (inasmuch as no such classification may ever be considered final and ultimately exhaustive) as they are interdisciplinary and therefore negotiate the boundaries between traditionally understood disciplines. A good example of such interdisciplinary competences are knowledge and skills in the area of terminology which constitute the topic of this study.

1. TERMINOLOGY WORK AS A REQUIREMENT

To begin with, it is beyond any doubt that terminology is a vital component of the modern translation paradigm, in particular as regards LSP translation. A glance at the earlier-mentioned quality standards instantly reveals that the word “terminology” appears on numerous occasions all throughout the text of both sets of guidelines. For example, the current ISO 17100 standard mentions terminology in clause 3.1.3. “Professional competences of translators” under pt. (d) *cultural competence* (“ability to make use of up-to-date terminology” and pt. (f) *domain competence* (“ability to understand content produced in the source language and to reproduce it in the target language using the appropriate style and terminology”), clause 3.2 “Technical and technological resources” under pt. (d) (“terminology management systems”), clause 4.6.3 “Linguistic specification” (“use of appropriate terminology”), clause 5.3.1 “Translation process” under pt. (a) (“compliance with specific domain and client terminology”) and also in Annex D “Pre-production tasks” under pt. (e) (“collection and preparation of reference materials”) (ISO 17100 Translation services — Requirements for translation services). References to terminology are equally abundant in the ASTM Standard guide for quality assurance in translation whose entire chapter 3 is dedicated to the various aspects of this issue and its impact on the quality of translation (F2575-06 ASTM Standard guide for quality assurance in translation). However, while it seems clear that

terminology is, in fact, a vital component of the translation reality, it is by no means equally clear as to what the notion actually signifies.

1.1. Towards an understanding of terminology

The word “terminology” usually brings to mind a set of specialised words or expressions which belong to a specific domain and are used to describe a small portion of our surrounding reality. A simple query in the Longman Dictionary of Contemporary English yields the following entry: terminology means “technical words or expressions that are used in a particular subject” (retrieved on 25.07.19). A more linguistically-inclined (and precise) definition states that “A terminology is a set of terms representing the system of concepts of a particular subject field” (Sonneveld and Loening 1993). While entirely correct, this definition only covers one part of the meaning of the term. For the purpose of this study, however, a broader perspective is necessary, i.e. one that treats terminology also as a branch of knowledge and a field of professional activity. According to Cabré (1998), terminology is a “discipline concerned with the study and compilation of specialised terms.” As such, it appeared at the beginning of the 20th century as a response to the rapid proliferation of specialised terms resulting from the dynamic technological development of that time. Notably, the pioneers of terminology as a field of study were not usually scientists, but rather subject field experts, including Eugen Wüster who is considered to be the founder of modern terminology and head representative of the so-called Vienna School. It was only in the second half of the 20th century that linguists became interested in terminology alongside technicians and from that moment onwards the discipline started to fall into two separate categories, that is theoretical and applied terminology. A general theory of terminology is based on an approach which gives major importance to the nature of concepts, relations between them and the relationships between terms and concepts as well as to assigning terms to concepts (Cabré 1998). From a practical, or applied perspective, terminology is understood as the process of compiling, describing, processing and presenting terms of special subject fields (Cabré 1998, 10). Lukszyn (2006) brings these two perspectives together arguing that the fundamental goals of terminology as an interdisciplinary study include analysing the functioning of specialised vocabulary, developing more efficient ways of constructing new terminological systems and improving the already existing ones (Lukszyn, Zmarzer 2006). For the avoidance of doubt, the above does not serve to argue that terminology is a fully independent scientific discipline. In fact, some of the outstanding representatives of the field claim it most certainly is not. According to Sager (1990):

There is no substantial body of literature which could support the proclamation of terminology as a separate discipline and there is not likely to be. Everything of import that can be said about terminology is more appropriately said in the context of linguistics or information science or computational linguistics. We see terminology as a number of practices that have evolved around the creation of terms,

their collection and explication and finally their presentation in various printed and electronic media (Sager 1990).

Lukszyn (2006) offers an elegant solution arguing that due to the fact that the subject matter of terminological research are specialised terms falling within the scope of various branches of knowledge, terminology itself is formally tied to all the other scientific disciplines and areas of practical activity. That, in turn, is reflected in the vast number of terminological dictionaries compiled worldwide and therefore, since the preparation of a terminological dictionary requires not only the knowledge of a certain industry-specific set of vocabulary, but also the principles and techniques of terminological activity (specialised knowledge), terminology should, from this perspective, be seen as “an auxiliary discipline with respect to other branches of knowledge and activity” (Lukszyn 2006). The researcher therefore does qualify terminology as a legitimate discipline with its own methodology, but at the same time renders it closely connected with, and indeed supplementary towards, other branches of knowledge. Notwithstanding the above, whether terminology is perceived as an independent science or an interdisciplinary methodology, it is against the aforementioned backdrop that it should be understood from the perspective of its significance for (albeit not only) translation, i.e. as the study of specialised vocabulary, the way it functions and the way it should be handled in the most efficient manner. More recently, the above catalogue was extended to include standardisation as an important component of terminological activity (Grattidge, Westbrook 1993, 9-21). It is of vital importance to realise that all of the aforementioned facets must be taken into account in order to properly understand the meaning of the word terminology as it is used in relation to translation.

2. THE STUDY OF TERMINOLOGY FROM THE PERSPECTIVE OF A TRANSLATOR

As mentioned above, describing, studying, classifying and otherwise handling specialised vocabulary is frequently referred to using the umbrella term of terminological activity. One of the key propositions of this article is that translators (in particular those working with LSP material) frequently perform terminological activity in their work. As mentioned above, while “a terminology” denotes a structured set of specialised vocabulary belonging to a given subject field, “terminology” as a field of academic and practical activity involves studying, describing, classifying and standardising such specialised vocabulary in line with certain rules and criteria. According to the above, placing specialised vocabulary in a data base would surely qualify as terminological activity as it requires the application of appropriate taxonomy, furnishing adequate and meaningful descriptions (definitions) and arranging lexical items according to a certain scheme (so-called macro- and microstructure). A data base must therefore have a structure, an internal network of relations between the individual units and a system for locating those units within the entire resource. That, in turn, seems in line with the

main assumptions of the study of terminological lexicography which is a branch of lexicography dealing with the theory and practice of developing terminological dictionaries (Karpiński 2008, 6) and, from another perspective, the art of terminography which is understood as the comprehensive methodology for the preparation of appropriate information concerning concepts and networks of concepts within a particular subject field (ibidem).

2.1. Terminological activity in computer-assisted translation

Handling terminology in the manner described above is, no doubt, an integral component of computer-assisted translation. CAT tools are becoming more and more widespread in the translation industry which is due to their availability and the fact that they have been largely adopted by professional translation agencies as the main tool for the rendition of translation services. These programs possess an extremely wide array of functionalities covering the entire spectrum of activities constituting a translation project (Szwed 2017, 234) and are used by translators, project managers, editors and proof readers alike. One of the key functionalities of every professional CAT tool is a special data base for keeping and retrieving terminology which is manually fed by the software user and which subsequently recognises and suggests equivalent terms during the translation process, as depicted in Figure 1.

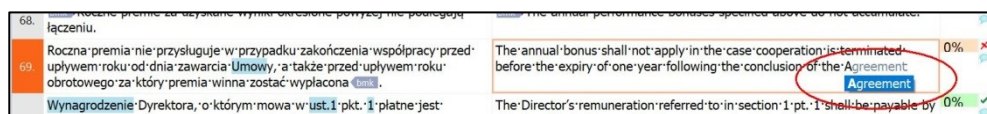


Figure 1. Automatic terminology retrieval from a database.

Source: Own work

In order to input new terminology for later use, a translator must manually update the data base in the program which is usually possible in a number of ways, however most commonly it requires selecting the source item and the target language equivalent and, subsequently, filling in the basic information about the new entry which facilitates later retrieval. This type of simplified input interface is presented in Figure 2 below.

As shown above, it is a very simple procedure which, in its basic form, requires no more than indicating the source and target item and confirming the selection with the “OK” button for the entry to be operational. Updating the entry with additional information, such as a definition, examples of use, grammatical information, entry identifier, project, domain, client or author information as well as additional descriptions or even an image or a photograph is not obligatory. This is, of course, a very limited form of using a resource which is otherwise significantly more complex. However, most translators choose to take advantage of the term base in this particular way, foregoing the benefits arising from the more advanced functionalities of the resource. However, as a term base comprises a set of lexical items functioning (as the case may be) within a terminological

macrosystem (Michałowski 2017, 21), it may either be seen as a simple glossary or assuming a more structured manner of processing the input material is applied, a proper terminological dictionary. Since most translators do, in fact, use the term base only as a simple glossary (i.e. without any structured processing of the lexical material), this mode of use deprives them of the various benefits offered by this resource limiting its functionality to maintaining lexical consistency in the translated document (Szwed 2018, 169). The benefits of using an active term base in a CAT tool are, no doubt, considerable – even if its structure is maintained on the minimum level of complexity (which, among others, guarantees smooth and expedient work). However, as the program does not restrict the number of term bases used with one project at a time, it is possible to operate a number of different term bases simultaneously – the fundamental differentiation between them being the manner of processing the lexical items in particular.

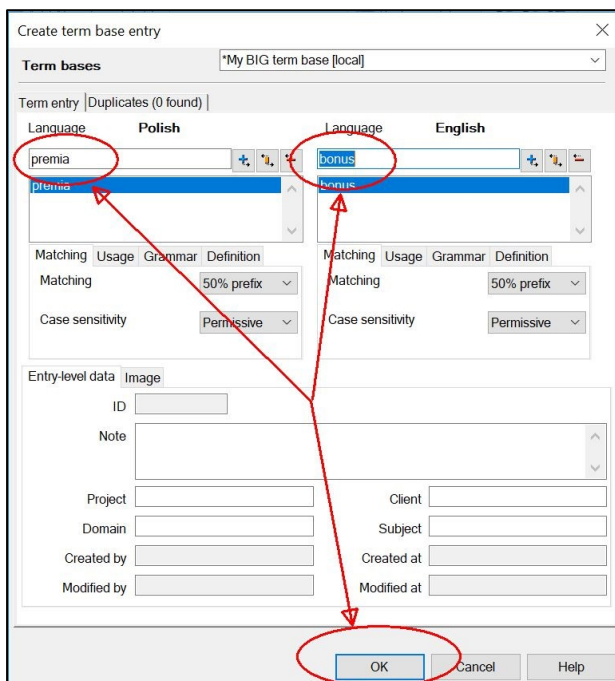


Figure 2. Creating a new term base entry with simple description.

Source: own work

Having made the claim that a CAT tool term base may, in fact, serve as a fully functional terminological dictionary, it seems justified to briefly recount the basic prerequisites which allow for such a classification. According to Lukszyn (2006), a terminological dictionary differs from a general language dictionary in that its entries are treated as units functioning within a certain cognitive paradigm which emphasises the relationships between the individual items (Lukszyn 2006). Furthermore, a terminological dictionary must be characterised by a certain macrostructure and a specific microstructure. The former denotes the general

limitations of the structure of the dictionary, including the principle whereby the contents of the dictionary should be based on a representative corpus of authentic texts containing up-to-date terminology used by professionals in the given field (Michałowski 2017), while the latter represents the specific realisation of the general principles which lay at its foundation, including, in particular, the choice of specific strategies for the description of the input material. It would appear that the functionalities of term bases embedded in modern CAT tools allow for the realisation of both the aforementioned parameters. The fact that it is possible to connect multiple term bases to a single project means that a translator is able to freely shape the general structure of each such base depending on the desired level of terminographic description and its place within the terminological macrosystem (ibid.). The point of departure here might be the fact that a typical terminological lexicon, that is a set of specialised lexical items representing the current state of professional knowledge within a given, specific field (STP 2002), contains up to around 2000 units (Lukszyn 2006). Furthermore, the numerous categories of description of lexical items available in the term base interface give the user considerable control over the microstructure of the base, as seen in Figure 3 below.

The screenshot shows a 'Create term base entry' dialog box. At the top, it says 'Term bases' with a dropdown menu showing '*My BIG term base [local]'. Below this, there are two panes for 'Polish' and 'English'. The Polish pane has a search box with 'premia' and a list of results below it. The English pane has a search box with 'bonus' and a list of results below it. Both panes have 'Matching' set to '50% prefix' and 'Case sensitivity' set to 'Permissive'. The bottom section, 'Entry-level data', contains fields for ID, Note, Project, Domain, Created by, Modified by, Client, Subject, Created at, and Modified at. Red arrows point to various fields and options, highlighting the advanced description capabilities.

Figure 3. Creating a new term base entry with advanced description.

Source: own work

Therefore, it is possible to arrive at a term base which will not only be representative of the given field of knowledge and adequately adjusted to the specific terminological lexicon which reflects its contents, but also structured and systematic

in a manner which allows it to function as a proper terminological dictionary. Generally speaking, the key is to properly estimate the number of lexical units, specify the type of dictionaries to be represented and choose the manner in which the particular elements of description are recorded (Karpіński 2017). It seems that all (or most) of the above are possible using the term base functionalities offered by modern CAT tools. That said, it would seem clear that the assumption whereby contemporary translators using professional computer-assisted translation software do, in fact, perform terminological activity, is by all means true.

3. TEACHING TERMINOLOGY WORK

In order to take note of the fact that the work of contemporary translators requires some form of terminological activity and, as a result, being able to perform that activity should be treated as a valid component of the translation competence (it appears that the requirements stipulated under currently applicable quality standards are also pointing in that direction), we designed an e-learning course for the purpose of teaching the basics of computer-assisted translation with the use of one of the leading CAT tools on the market (Kilgray's memoQ). This particular product was selected due to its very good performance, comprehensive functionality, modern interface and considerable popularity on the translation market (in fact it is one of the two most popular CAT tools in Europe – aside from SDL Trados Studio). While there are also free CAT applications available on the market (in most cases as on-line tools), their functionality is significantly limited and often does not include the desired terminology management features (and where it does, their terminology data bases are simplified and do not offer the possibilities discussed in this paper, which determine the core value of terminology training via e-learning infrastructure). The course utilises the open-source Moodle platform and is available on the website of the Maria Curie Skłodowska University known as “Wirtualny Kampus” (Eng. *Virtual Campus*). It currently consists of 10 sections and includes topics such as the basics of CAT tools, software configuration, setting up projects, analysis and pricing of translation jobs, using the translation editor with its various functions, including translation memories, filters and pre-translation tools, exporting target files, handling term bases and using quality assurance functionalities. The course also contains glossaries of key terms, feedback questionnaires for participants and discussion forums for responding to questions or doubts as to its particular features. Furthermore, throughout the course students are required to perform homework tasks on their own computers (we secured an appropriate number of memoQ licences from the software's manufacturer to distribute among students for the purpose of individual work during the course) and upload them to the platform for evaluation. The part of the course which deals with term base management covers issues such as setting up new term bases, various ways of feeding new terms into the base such as manual addition of terms during translation, feeding glossaries in Excel format and using terminology extraction tools, properly describing terminology entries and creating logical and meaningful definitions as well as

marking entries for inflexion and capitalisation (inflexion is a major issue in terms of practical operation of the base, however it is specific to the particular CAT tool chosen for the course; in fact other computer-assisted translation applications available on the market, such as SDL Trados Studio, utilise different solutions for handling word morphology and do not always require marking off words stems). The course also covers setting up text corpora and exporting translation memories, which may later be used for the purpose of term extraction in line with the principles of representation of terminological lexicons.

In short, what we are mostly emphasising is:

- the ability to set up various types of term bases from the perspective of their function and use,
- the procedure of creating new term base entries on various levels of description,
- selecting lexical items to be fed into the term base from the perspective of unit length, frequency, representativeness for the given lexicon and grammatical category,
- maintaining the term base in good working order by appropriately marking inflexion and capitalisation as well as removing duplicate terms and synonyms.

The following figures 4 and 5 present snapshots of parts of the course dedicated to some of the skills referred to above:

The screenshot shows the memoQ software interface. The main window displays a list of translation units. The first unit is highlighted, showing the source text 'nowy typ urządzenia' and the target text 'new type of device'. A red circle highlights the source text, and another red circle highlights the target text. A red arrow points from the source text to the target text, indicating the translation process. The interface includes a sidebar with navigation options and a top menu with 'Podgląd', 'Edytuj', 'Raporty', and 'Ocena esejów' buttons.

Id	Source Text	Target Text	Progress
1	Informacje podstawowe	Basic information	100%
2	nowy typ urządzenia	new type of device	100%
3	kod zakładu dostarczającego urządzenie	code of facility supplying the device	100%
4	numer seryjny	serial number	100%
5	identyfikator	identifier	100%
6	schemat	drawing	100%
7	kategoria operatora urządzenia	category of operator of the device	100%
8	numer urządzenia	number of the device	100%
9	data i miejsce produkcji	date and place of production	100%
10	numery dostawcy	supplier numbers	100%
11	identyfikator producenta	producer's identifier	100%

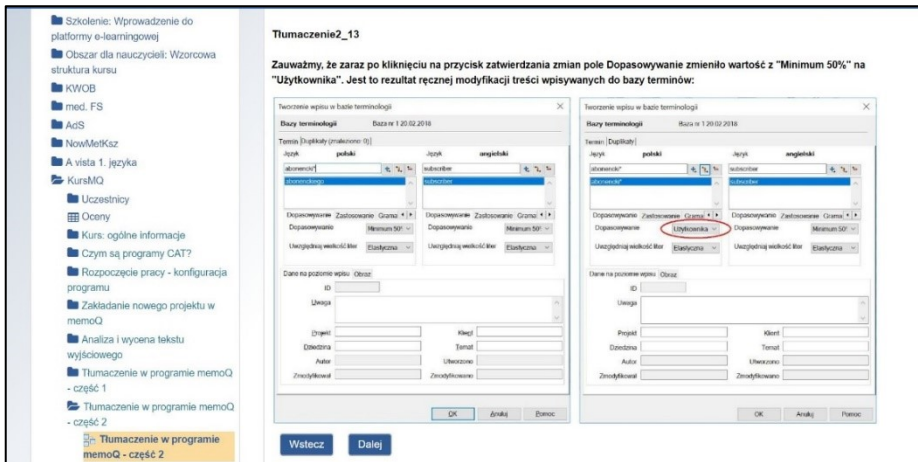
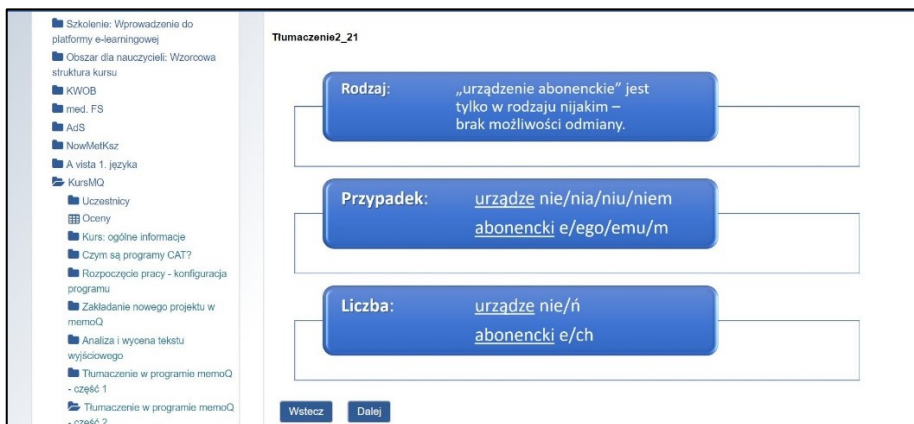


Figure 4. Sample course pages dedicated to adding terms to the base – direct method (above) and properly recording inflexion and capitalisation of terms (below).

Source: <https://kampus.umcs.pl> (Accessed 20.07.2019)



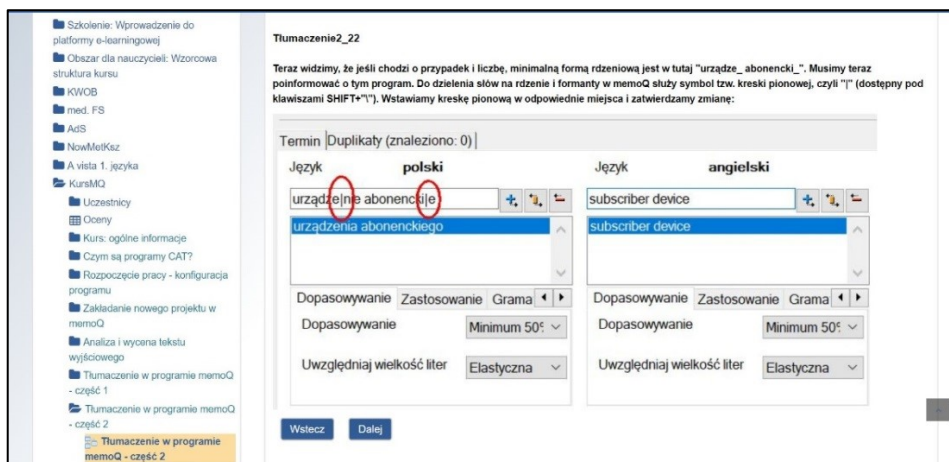


Figure 5. Sample course pages dedicated to the strategy in the area of adjusting term length (above) and the proper placement of inflection markers (below).

Source: <https://kampus.umcs.pl> (Accessed 20.07.2019)

Having completed our course, students are not only capable of using the software from a technical perspective, but (unlike in the case of the majority of commercially available CAT tool training courses) are also aware of the key linguistic and terminological determinants of translation activity. That is particularly important given the fact that the development of CAT software and its predominance on the translation market appear to be, to a large extent, driven by translation agencies' profit margins which greatly benefit from any tool that streamlines and accelerates the translation process (Szwed 2017, 238). However, it is easy to imagine that in this state of affairs the didactic value of CAT training from the perspective of problems such as equivalence, the treatment of errors, selection of appropriate translation strategies and, notably, handling terminology, may be treated as secondary, or even entirely obsolete.

What is more, the e-learning course referred to above falls in line with the scheme of practical training at the Marie Skłodowska Curie University in Lublin which provides that all translation students must complete internships or work placements as part of their study curriculum. As part of the practical training, the students must perform an appropriate number of tasks for which they receive scores.

These include:

- translating texts,
- editing and proofreading finished translations,
- interpreting (consecutive, escort, simultaneous, liaison),

- performing audio-visual translation (including film subtitles and computer game localisation).

but also:

- compiling text corpora for the purpose of project work and extracting translation memories from these corpora,
- extracting terms to glossaries for the purpose of later import to CAT tools.

Furthermore, the role of terminology manager has been established and assigned to each translation project along traditional functions such as project manager, translator or editor. The terminology manager actively participates in the project work and is responsible for setting up term bases and looking after their appropriate division and classification, feeding basic terminology into the data bases prior to the launch of the project, verifying the quality and condition of data bases after the completion of the project and instructing other participants as to the proper procedure for adding new terms to the bases.

CONCLUSION

By doing the above, the University makes sure that students are not only aware of the importance of modern computer tools in use on the translation market and capable of using some of the most popular among them, but also possess the necessary translation competences including, notably, skills in the area of terminological activity. The use of e-learning infrastructure offers numerous benefits, the most significant of which include, for our purposes, the possibility to understand the value and importance of terminological activity through its application in practice, which is possible owing to the individualised nature of the self-study scheme. With the appropriate structure and built-in guidance, students become accustomed with the fundamental techniques and principles of terminological work in an up-to-date context and modern technological environment and, subsequently, learn to apply that knowledge in their own translation projects. Thus generated expertise is easily transferable to other forms and stages of translation training in the university and also to subsequent, hands-on professional activity. Notably, this type of synthesis between academic knowledge and modern computer skills is otherwise difficult to obtain due to curricular constraints and, perhaps, the novelty of the idea of including terminological activity in translator training schemes. It does, however, seem to be an important and valuable programme component, especially in light of the growing importance of terminology work as outlined in the earlier parts of this paper.

It is beyond doubt that this scheme will be subject to future improvement and development along with the appearance of, among others, new computer programs and new e-learning infrastructure. As mentioned earlier, Moodle is certainly not the most modern e-learning platform and may in the future become

outdated or even entirely obsolete. The same holds true for CAT tools which are rapidly gaining popularity worldwide and becoming ever more complex and sophisticated. At the moment translators have a wide array of applications to choose from with different user interfaces, core functionalities and underlying algorithms. While the treatment of specialised terms and the principles of terminological activity are independent from such technical considerations, it seems important to discuss ways in which these differences will influence the nature and quality of terminology work (an example being the inflexion markers in memoQ as discussed in part 3 of this paper). Another crucial consideration appears to be the legal status of terminology data bases which is subject to both local and EU legal regulations and as such renders itself rather unclear. The issue of data base protection, and the particular laws under which such protection is to be guaranteed, requires attention as it may have an impact on the handling of term bases in the future.

In light of the above it becomes clear that any person responsible for practical training in higher education institutions must exercise a good deal of diligence and always be aware of the new developments on the market, in particular due to the fact that the very goal of practical training is to prepare students to function on that market with all its new features, expectations and requirements. It seems that the efforts undertaken at the Maria Skłodowska Curie University are a good example of this approach.

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