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Level of Familiarisation and Practical Use of Translation Tools by Translation Students

ABSTRACT

Due to the fact that we live in the digital age, it is understandable that translation tools and technology are increasingly becoming an important area of research studies. Translators use a number of translation tools, such as terminology management software, printed and electronic dictionaries and glossaries, multilingual online terminological databases, terminology extraction tools, and social networking tools. In fact, translation tools are any tools and resources used by translators in the translation process whether they are in electronic, digital or printed format. Considering that translation is an energy-consuming and time-consuming process, which requires translation students to be meticulous about details, facts, terminology and transfer of meaning, students often look for shortcuts in the translation process, thereby disregarding the importance of research and use of various translation tools that contribute to high quality translations. The purpose of this paper is to analyse student practices in the translation classroom and their familiarisation with the most commonly used and useful translation tools. Based on the results of the conducted survey research, specific recommendations can be made about which translator's competences and skills need improvement and further development. Furthermore, the paper strives to find practical application of the research results, aimed at improving applied practices in the translation classroom and the quality of students' translations.

KEY WORDS

Translation tools, translator training, survey, CAT tools, terminology database

1. Introduction

Generally speaking, translation is an energy-consuming and time-consuming process, which requires translation students to be meticulous about details, facts, terminology and transfer of meaning. But, faced with a constant pressure of time, translation students often look for shortcuts in the translation process, thereby disregarding the importance of background

research and use of various translation tools that contribute to higher quality translations. Considering the interdisciplinary nature of the translator profession, the use of technology as well as various tools and resources is a vital constituent part of the translation process.

2. Subject and Aim of Research

The purpose of this paper is to analyse student practices in the translation classroom and their familiarisation with the most commonly used and useful translation tools by obtaining quantifiable data through a survey. Based on the survey results, specific recommendations can be made about which translator's competences and skills need improvement and further development. Furthermore, the goal of this research is to find practical application of the results, aimed at improving applied practices in the translation classroom as well as improving the overall translation teaching methodology.

The results will point out whether students develop the necessary skills to use different translation tools and whether they should be integrated in practical teaching to a greater extent. The final goal is to increase the quality of students' translations and to raise awareness of the importance of acquiring important translator skills not only through formal education, but throughout the professional life as well.

3. Methodology and Questions of the Research

For the purpose of this paper, a survey was conducted in 2018 at the Department of Translation and Interpreting within the "Blaze Koneski" Faculty of Philology in Skopje, Macedonia.¹ The survey method, involving a questionnaire, is a useful research instrument for collection of data, and according to Groves (2009, p. 20), it is a useful tool for assessment of education progress. Furthermore, a survey questionnaire is often used to collect measurable data from a specific group of people (Fanning, 2005, p. 1), such as students giving opinions on an important aspect of their profession.

The study was conducted among 47 fourth-year students who took the two-semester course in Specialised translation from Macedonian into English (correspondingly, in seventh

¹ The Department of Translation and Interpreting in Skopje is a specialised department offering a choice between two study modules of translation or interpreting, and language combinations involving the mother tongue (Macedonian) plus a combination of two foreign languages (English-German, English-French or German-French).

and eight semesters of Bachelor Studies), which primarily dealt with written scientific and technical translation. The survey was specifically sampled and used for the needs of the research presented in this paper, and it was composed of a paper-based questionnaire completed during class time. All respondents anonymously filled out a semi-structured questionnaire with 15 questions which were a combination of questions predetermined by the researcher and open-ended questions (see Annex 1). Precisely speaking, they were dichotomous questions offering a yes or no response, but at the same time complemented with a third open-ended option, requiring respondents to explain the answer in their own words and to describe their opinions and practices. The students involved in the survey have already had two semesters of classes during which they have been acquainted with different translation tools, especially translation software, dictionaries and glossaries. Therefore, we shall make the initial assumption that translation students are familiar with translation tools to some extent (this will serve as an initial thesis in this paper), even without having sufficient evidence as to whether students apply their knowledge in practice.

Even though it was an anonymous questionnaire, respondents were asked to write down a code and to use it for future surveys conducted in class. The questionnaire consisted of three sections, with the questions becoming more specific with each part. It contained succinct and unambiguous questions, the purpose of which was to elicit feedback and honest opinions from the respondents on their personal experience and applied practices. A semi-structured questionnaire is convenient for providing both numerical data (yielded from the predetermined questions) as well as qualitative data that are generated from the open-ended questions (Cohen; Manion; Morrison, 2000, p. 306). Through this structure, the questionnaire revealed certain trends among students that help to identify the areas of teaching that need to be reinforced.

The motivation for this paper stems from the initial impression that many students in the translation classroom are not sufficiently informed about available resources or do not sufficiently use them, even if they are familiar with some of them. A tendency of reluctance towards the use of translation technology is observable among translation students. Hence, the paper aims to answer two questions: 1) Are translation students familiar with available translation tools, and with which precisely? 2) Do students practically use and effectively benefit from the use of available translator tools?

4. Reference Documents and Translation Tools Definition

Numerous materials in the form of textbooks can be found on translation tools, however there are not that many comprehensive classroom-based research studies. Somers (2003, p. 9) studies the use of computers in translation practice, and, in collaboration with Hutchins, provides one of the first textbooks on machine translation (Hutchins & Somers, 1992). However, many agree that machine translation is for communicative purposes only, and must be strictly controlled. Modern technology changes translators' traditional tools as they are increasingly available not just in electronic, but also in machine-readable format (Newton, 2002, p. 1). Translation software is a constituent part of a translator's everyday life, and it contains a text analyser and a terminology database (Newton, 2002, p. 2).

There is numerous empirical research on translation tools and translator skills. The European Commission offers many publications and guidelines on translation. For example, "Languages in Action" define specific translation tools, such as the internet, translation memories, terminology banks, machine translation, and dictionaries (2013, p. 13). This document also defines key translators' skills, such as drafting skills, thoroughness and accuracy, research skills, and computer-literacy skills (2013, p. 5).

Similar research in this field has also been related to higher-education classroom experiences, although covering only certain aspects and segments. For example, research conducted by Kodura (2016) only focuses on dictionary use among translation students, which is only one segment of translation tools. Other studies focus on the use of technology in academic translation teaching (Odacioglu & Kokturk, 2015), whereas He specifically focuses on the application of CAT tools in scientific and technological translation (He, 2017). Others mainly focus on language learning through translation (Köse, 2011), or use of CAT tools in English teaching (Yao, 2017). This leaves plenty of grounds for researching the overall use of translation tools in classroom and academic context.

In the digital era, translators use a number of translation tools, such as terminology management software, printed and electronic dictionaries and glossaries, multilingual online terminological databases, terminology extraction tools, corpus processing tools, social networking tools and others. Kenny (2011) is among those who believe that translation is becoming a highly technologised profession. Hence, translation tools are any tools used by translators in the translation process, whether they are in electronic, digital or printed format.

They do not only include electronic sources, and are also not solely confined to translation software, but cover a much wider scope.

Newton describes that translation software contains a text analyser and a terminology database (2002, p. 2), and that CAT tools operate in split-screen editing mode (2002, p. 8) and function on the basis of translation memories and a translation glossary, or terminology database. The latter form a part of terminology management systems that enable organising, retrieving and storing terms into clear databases that can later be reused by others.² A terminological database (or termbase) is a central database containing approved terminology and related information, and are important for managing terminology.³ It is widely accepted that the use of terminology management tools and software contributes to high-quality, accurate and consistent translations.

Kenny (2011) highlights that termbanks share many similarities with electronic dictionaries. The internet is abundant in diverse online dictionaries, glossaries and online terminological databases, many of which are multilingual, up-to-date with latest terminology and of different quality and reliability. As a result, European institutions suggest reliable sources of terminology databases, glossaries and thesauruses available in a multitude of languages.⁴ Furthermore, one must not forget the evolution of cloud-based translation tools that will reshape the translator profession in the near future.

Considering the above, the purpose of this paper is to examine how familiar the students are with all of the previously mentioned tools and resources for translators. In fact, the results infer that it is necessary to enhance the translator training curriculum with a range of practices (much wider than just CAT tools) in order to better prepare translation students for the future challenges of their increasingly technologised profession. Certain authors emphasise the issue of adjusting translation and interpreting training programmes to recent developments in IT, especially in CAT tools (Kearns, 2006, p. 44). In this context, Kiraly's work on translator training (1995) is also worth mentioning. The current translator training strategy involves integration of CAT tools in the translation process as well as different forms of audio-visual translation, but should be enhanced with internet-using skills (where the internet is a source of

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²Source: https://www.sdltrados.com/solutions/terminology-management/

³Source: https://www.sdltrados.com/solutions/terminology-management/termbase.html

⁴Source: http://termcoord.eu/

information mining), reliability of information used, use of parallel texts and terminology management systems, to mention but a few.

5. Results of the Research

This chapter presents the results of the survey on the basis of a questionnaire the purpose of which is collection of data. The questionnaire includes 15 questions, grouped into three sections, which analyse three important segments: the students' ability to engage in browsing and information mining, students' skills to use CAT tools, and the use of other translation tools and resources. The questionnaire yielded a high response rate. The dichotomous questions were analysed by the researcher and generated an occurrence of responses that was coded into statistical data and figures, whereas the responses from the open-ended questions were qualitatively classified into groups.

The first part of the questionnaire analyses the ability of translation students to conduct research (Questions 1-4). The results of the first question regarding students' opinion on the importance of browsing and information mining in the translation process are statistically presented on the first figure below.⁵

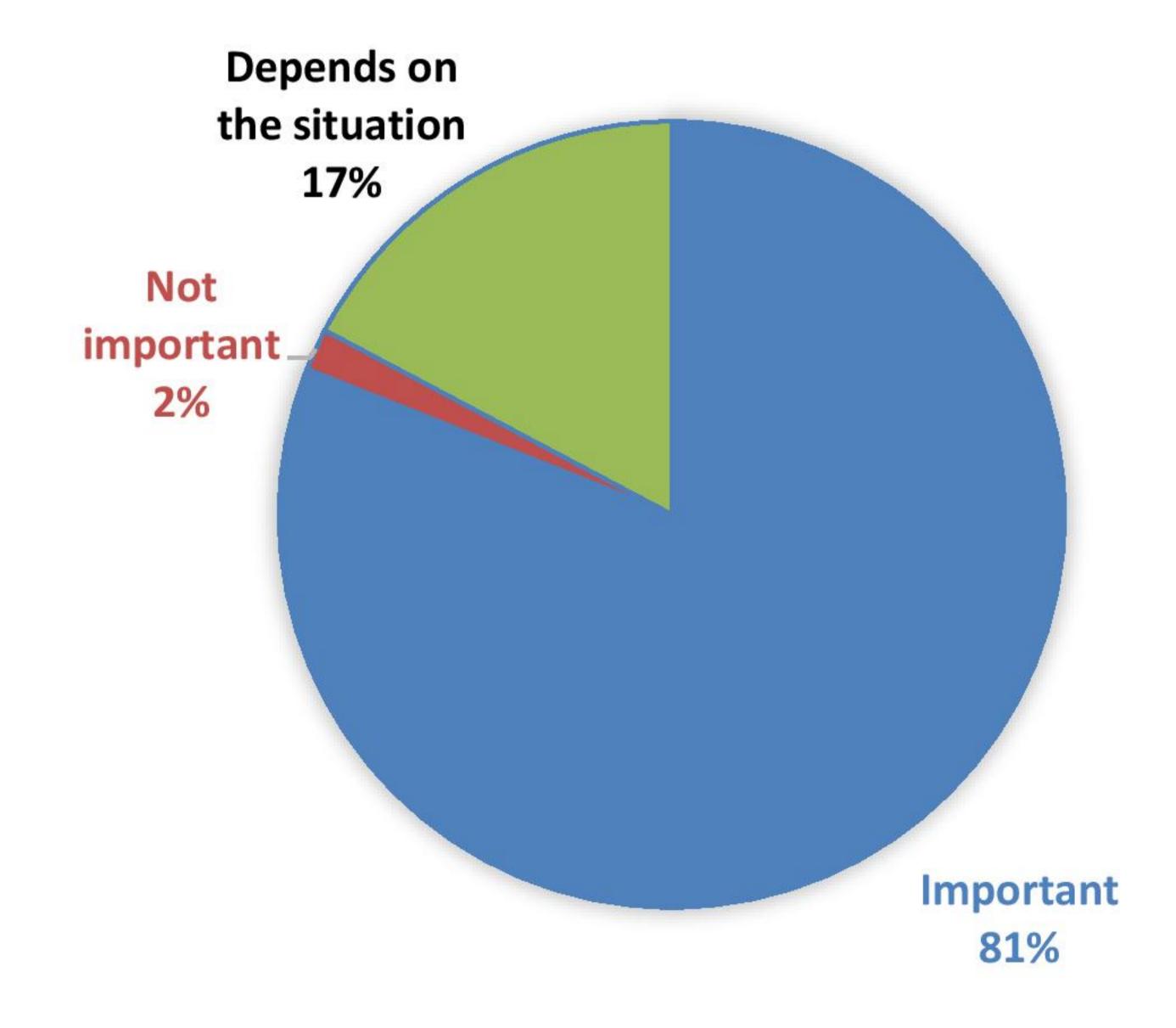


Figure 1 Students' opinion on the importance of browsing and information mining

⁵All figures in this paper present author's data. Certain percentages do not correspond with the number of surveyed students as (in some questions) open-ended options to provide explanations were left empty, whereas some students gave several options.

Figure 1 shows that 81% of surveyed students rightfully believe that it is important to engage in browsing and information mining while translating, and not just to simply focus on finding translation equivalents in dictionaries. Only 2% of those surveyed think otherwise because they believe that information mining is not an important segment of the translation process, whereas 17% do not have a specific opinion on this and indicate that the importance of the issue when translating is largely dependent on the specific situation. However, the results of the second question reveal that although most students are well aware of the importance of the above issue when translating, their actual practices in the translation classroom do not always involve information mining. This conclusion can be demonstrated with the results presented on the figure below.

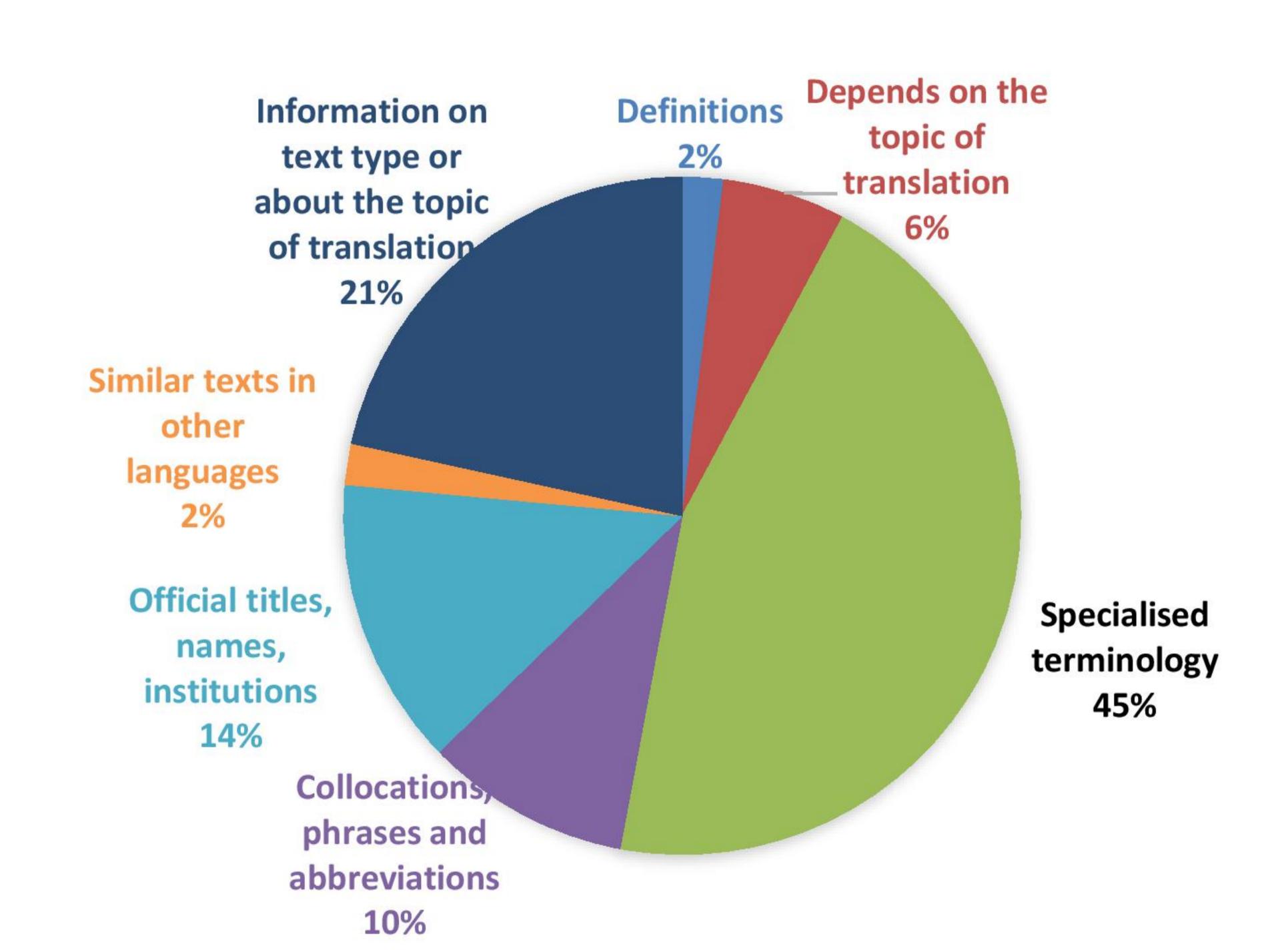


Figure 2 Main focus of information mining

The second question was aimed at discovering the main focus of translation students by asking them to explain what they mainly focused on when engaging in information mining. Figure 2 shows that students mainly focus on finding specialised terminology when translating (45%), as well as collocations, phrases and abbreviations (10%). Students focus to a lesser extent on finding information on a specific text type or information related to the topic of translation (21%), official names, titles and institutions (14%), as well as definitions (2%). A small number of student looks for diverse information depending on the topic of translation

(6%), whereas some even browse through parallel texts in other languages (2%). This discrepancy between students' opinion and their actual practices (shown with the first two questions) reveals that, although students are well aware of the importance of information mining when translating, they are not very familiar with specific information mining techniques that could serve as a useful tool for translators. This conclusion can be additionally demonstrated with the results of the third question presented below.



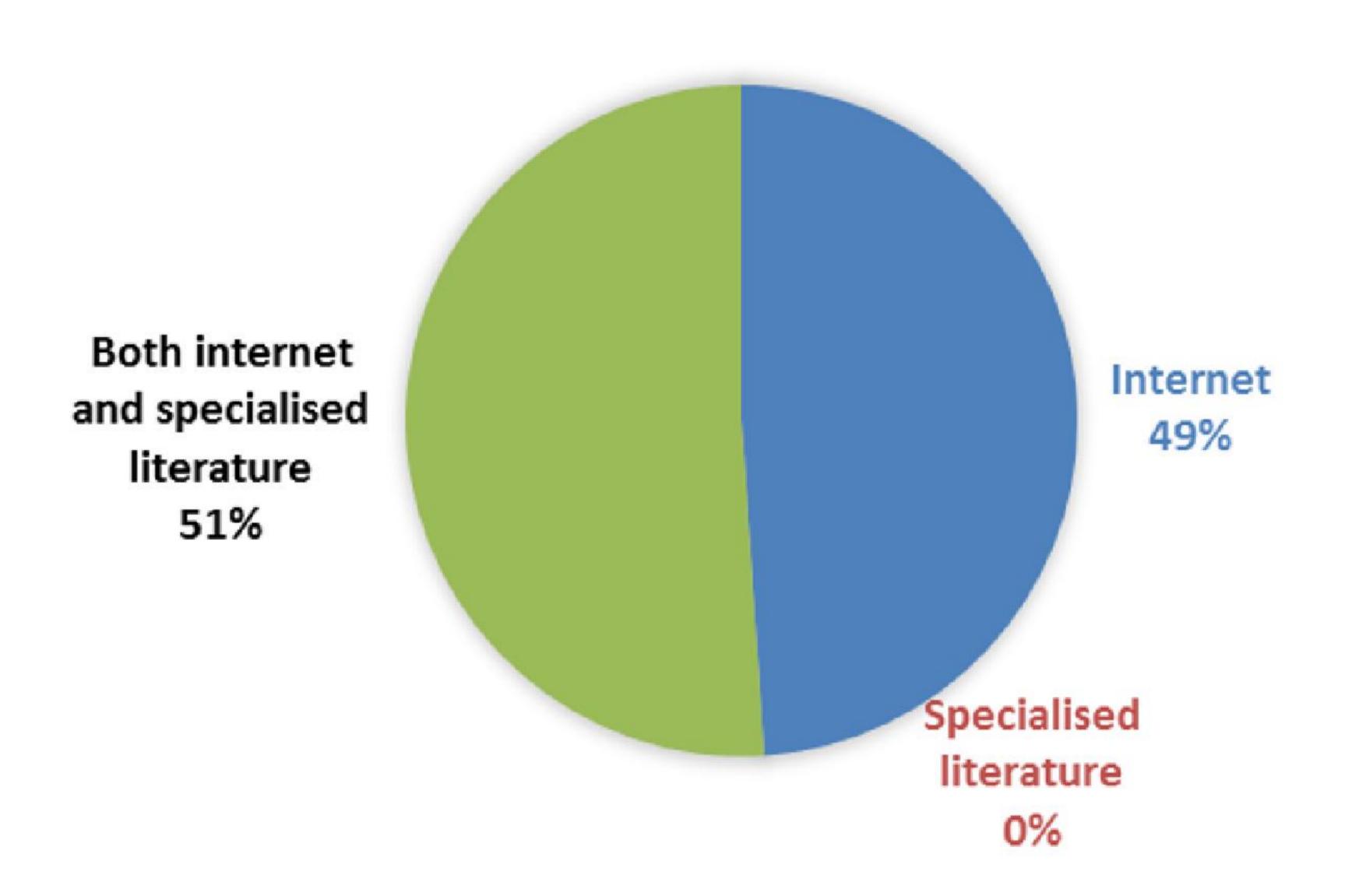


Figure 3 shows that students mainly search for information on the internet (49%), a large group of those surveyed search for information both online and in specialised subject-related literature (51%), whereas no one uses specialised subject-related literature as the main source of information (0%), regardless of whether they need information of terminological or specialised nature. This shows that, even though different types of documents can be found in electronic form, many translation students seldom rely on specialised subject-related literature as a source of accurate and reliable information, but rather resort to unreliable website content. In fact, a tendency for inaccuracy can be observed through students' translation assignments both in terms of inaccurate facts and unreliable terminology.

Furthermore, when asked to mention which specialised subject-related literature students mainly refer to when translating, only 13 (out of 24 students) were able to mention specific examples, such as publications, parallel texts available in other languages (that serve as

reference materials), encyclopaedias, grammar books, various textbooks and translation manuals. This means that, even though 51% resort to the best practice of relying both on internet and specialised subject-related literature, students need to be much more informed about useful and available specialised resources (apart from websites) in order to get reliable and accurate information, facts and terminological solutions. In addition, when asked to mention their purpose of using specialised subject-related literature when translating, the surveyed mentioned that they mainly use it to search for terminological solutions and to check for accuracy of information, especially when they deal with complex specialised topics (such as, economy, law or medicine).

It is stunning that nobody uses specialised subject-related literature as the main source of information, and what is more, seven students admit that they never look for any type of information in specialised subject-related literature or publications, without indicating the reason for this. However, translation students appear to be quite familiar with online sources of information and indicate that they mostly use the following: institutional websites, website offering information on related topics, encyclopaedias (Britannica, Wikipedia), parallel texts in other languages (serving as reference materials), digital resources in the native language (Makedonskiinfo), web browsers (Google), translation forums (Translator-Interpreter Pound, Translators' Playground, Proz), multilingual terminological databases (IATE, Eurovoc, Eudict), monolingual dictionaries (Merriam Webster, Oxford, The free dictionary), bilingual dictionaries (Nabu), and collaborative and social translation (Reverso, Glosbe).

To initially conclude, based on the results presented on the three figures above, it is safe to state that students are well informed only about certain segments, but they are not entirely able to search for reliable and accurate information (whether of terminological or specialised nature). Many students do not understand that in-depth research is a key element of the translation process that contributes to accuracy, reliability and precision of the information presented in specialised or technical translations. Hence, translation students must become more familiar with information mining techniques.

The initial conclusions can be additionally confirmed or discarded with the results of the second and third part of the questionnaire. Specifically, the second part of the questionnaire focuses on students' skills to use translation tools (Questions 5-7). The first set of analysed skills is presented on the figure below.

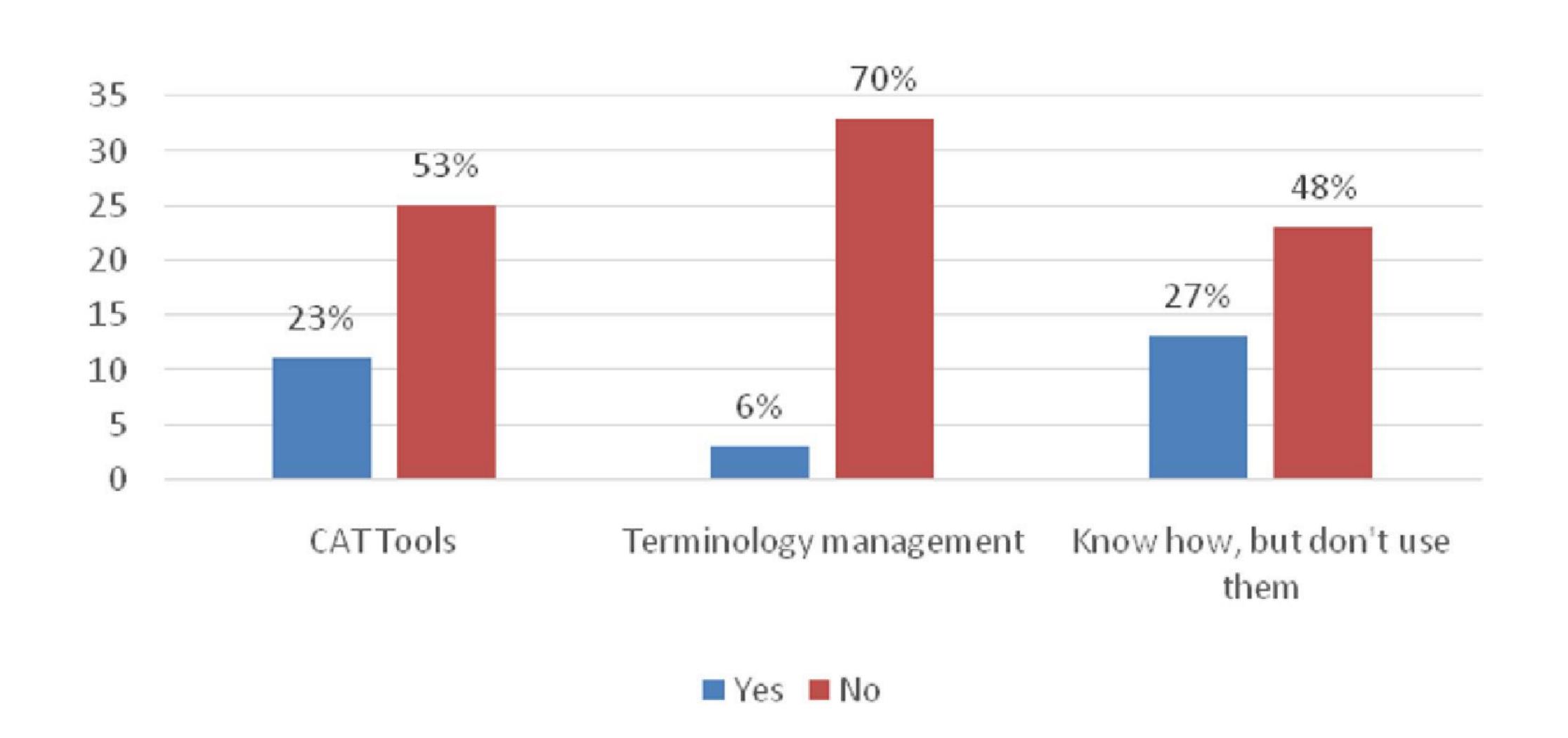


Figure 4 Ability to use terminology management and translation software

Figure 4 reveals that 53% of total surveyed students stated that they do not use Computerassisted translation tools (even though 27% of them stated that they were familiar with their use). As high as 70% are not familiar with terminology management systems. Only a small number of translation students use them when translating, i.e. 23% use CAT tools (mainly Wordfast), and as few as 6% use terminology management software (mainly Wordfastcompatible translation glossaries). When asked about how they benefit from the use of such translation software, students rightfully mention that these tools save time, enable translation glossary creation that serve as their personal dictionaries, contribute to translation efficiency and accuracy, have a convenient and visually-friendly interface, and even facilitate technical editing. Although translation students appear to be well aware of their benefits, these tools are insufficiently used in practice. But the particularly alarming aspect is that as high as 27% stated that even though they are familiar with the use of CAT tools and terminology management software, they do not use them in practice and fail to explain the reasons for this in the open-ended option. It could be safe to conclude that this phenomenon is partly owed to the fact that CAT tools are not used during every single translation class they attend, and the usage of said tools has therefore not yet become an everyday practice. This means that students must be additionally stimulated in the translation classroom to practically use the tools in the translation process on an everyday basis.

Furthermore, although these useful tools are underused, it is surprising that translation students seem to be well informed about Machine translation (MT), mainly Google Translate and Yandex. In particular, 25% admit to using MT when translating, 16% never use it, and even

though 59% explain that they rarely rely on MT it still means that they consider it an option. Those who use it explain that they resort to MT because it is a fast solution that saves time and offers translation suggestions that can easily be corrected and adapted into usable text, whereas others use it to double check what they have already translated, and a few have come to the realisation that it only offers literal translations which are not usable. This leads to the conclusion that translation students must be better familiarised with the use and benefits of translation software, as it clearly contributes to saving time, higher efficiency, stylistic and terminological alignment, convenience, and in this way they might even get defocused from unreliable and imprecise Machine translation.

The use of dictionaries and glossaries in different formats (electronic, digital or hard-copy) is an essential skill in the translator profession. Therefore, the third part of the questionnaire examines the types of tools and resources used by translation students. Four questions shed light on this aspect (Questions 8-15), and the results are presented on four different figures below.

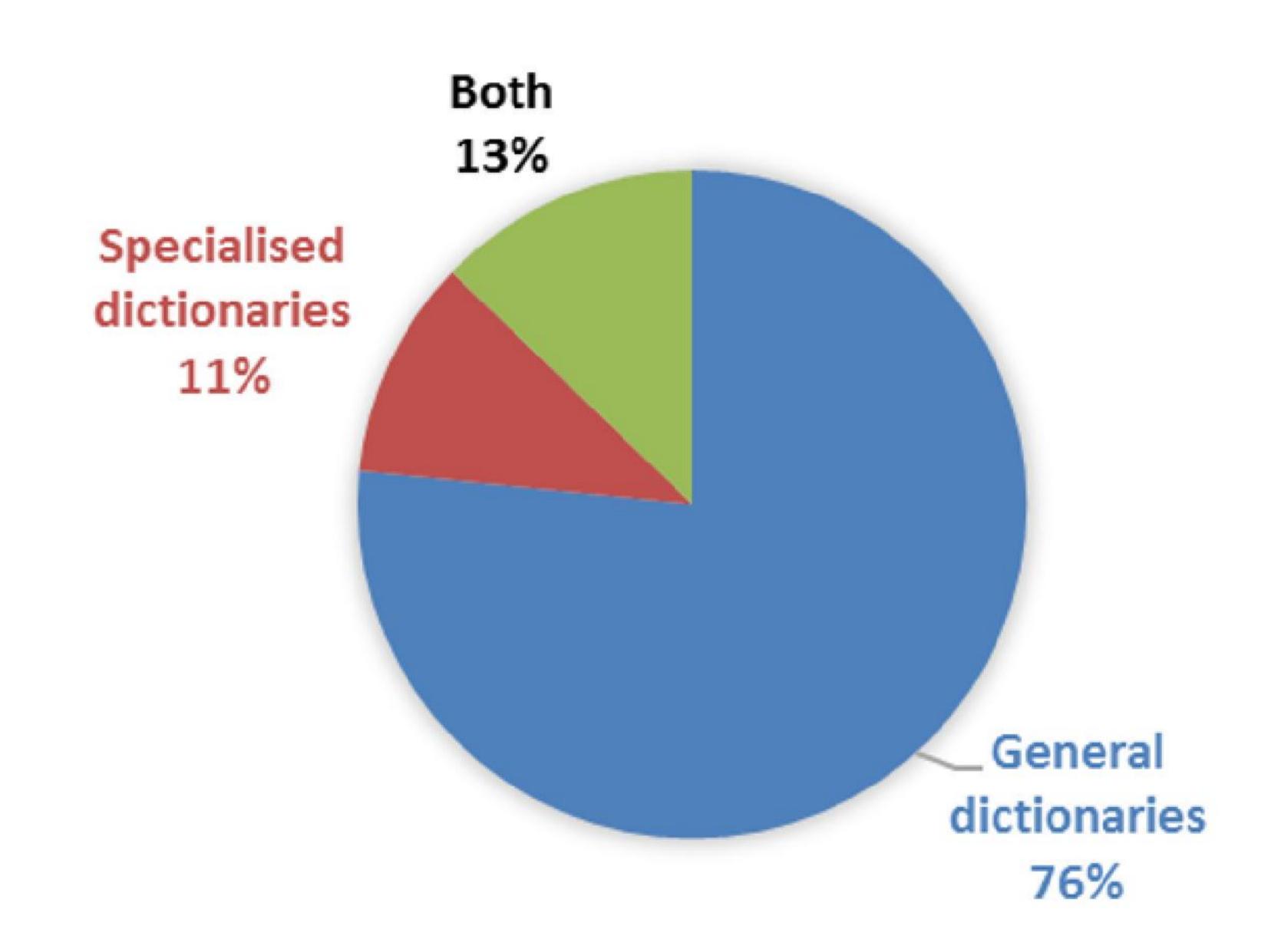


Figure 5 Types of dictionaries and glossaries used

Figure 5 shows that translation students mainly use general dictionaries and glossaries (76%), which is a large number compared to those who mainly use specialised dictionaries and glossaries (11%). Only a small portion use both general and specialised dictionaries (13%) in the translation process. This is unfavourable because in the translation classroom they mainly

deal with scientific and technical translations, which require adoption of skills for searching highly complex and specialised terms and phrases. Familiarisation with specialised dictionaries and glossaries in complex topics, such as law, economy, finance, European Union, medicine, or ICT is of vital importance. In addition, the open-ended questions show that those who do use specialised dictionaries lack in-depth knowledge of available topic-related resources as they were only able to name few dictionaries, such as dictionaries of business, law, mechanical engineering, medicine, ICT and unspecific online glossaries. This clearly shows that students rarely spend time searching for new resources they could benefit from; one student even commented that "translation students should use more specialised dictionaries, but they are not well informed or familiar with them". This shows a level of awareness about this weakness among students and even highlights the need for more narrow subject-related specialisation of translation students.

Furthermore, it is evident that students are well-informed about general dictionaries, as they indicated that they mainly use monolingual dictionaries with explanations, bilingual dictionaries with translation equivalents, illustrated dictionaries, dictionaries of idioms, synonyms, expository dictionaries in the mother tongue, and encyclopaedic dictionaries. However, general dictionaries are not of key importance for specialised translations. As for the most commonly used sources of terminology, the questionnaire further examines the format of dictionaries and glossaries used, as shown below.

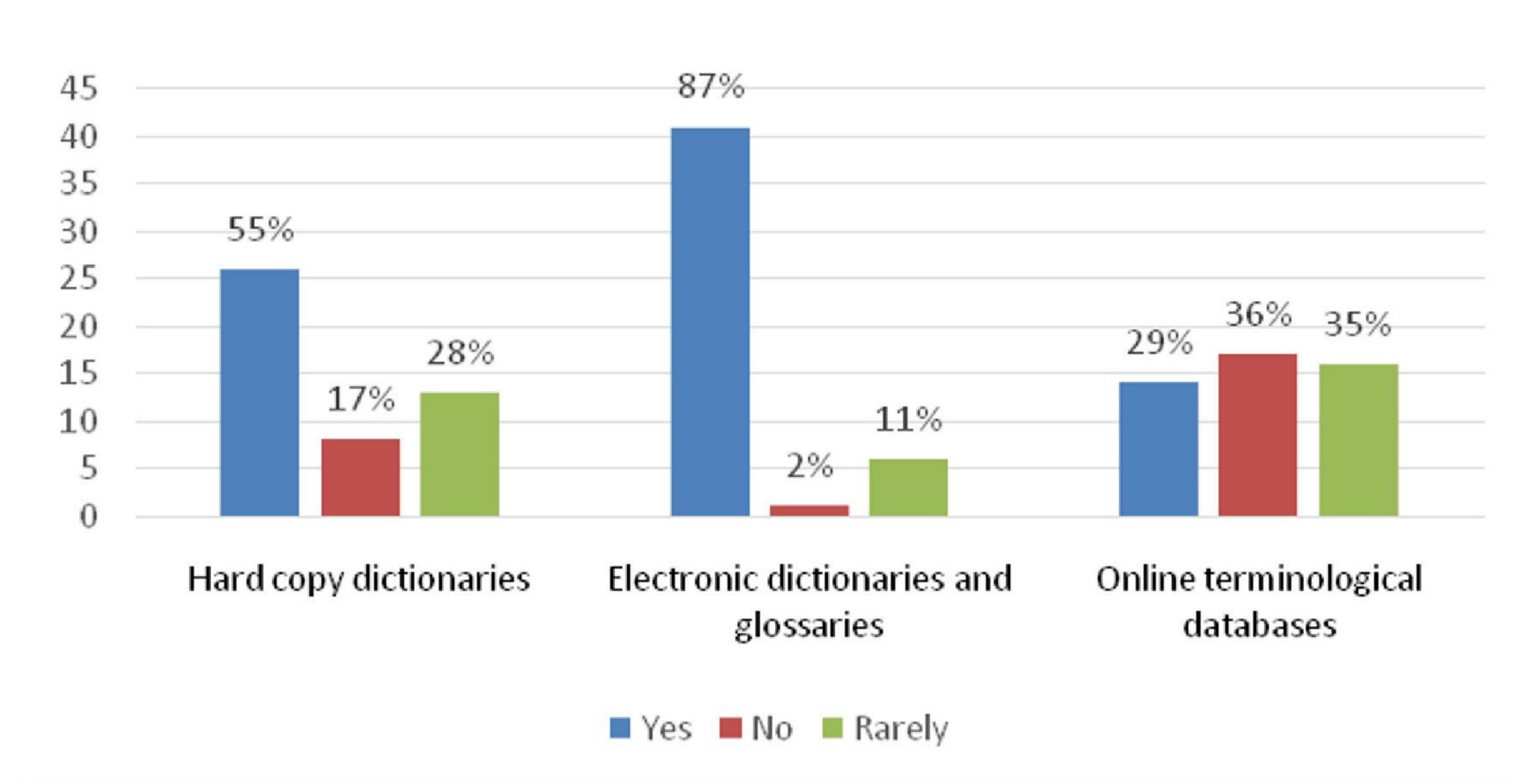


Figure 6 Format of dictionaries and glossaries used

Figure 6 shows that the most commonly used translation tool for terminology search among translation students are electronic dictionaries and glossaries (used by 87% of surveyed students) as this is the most convenient for them in today's digital age. Up to 55% still use classic hard-copy dictionaries (in printed form), whereas only 29% rely on online terminological databases (which are often multilingual). The open-ended questions point out that even though as high as 87% use electronic dictionaries and glossaries, when asked to name specific examples, many students were able to mention only unreliable online dictionaries with translation equivalents. This is a problematic area, because searching through reliable and trusted sources is an important translator skill that needs to be adopted and further developed through practice.

Furthermore, the overall results of this question lead to the conclusion that students prefer to use bilingual dictionaries (and glossaries) that offer ready-made translation equivalents, as this is easier, but passive. Thus, a tendency of avoiding active online browsing for terminology is observable among translation students. Some even admit that when unable to find readymade translation equivalents in dictionaries, they often resort to Machine translation for ideas (instead of consulting multilingual online terminological databases or providing their own descriptive or functional translation equivalents). Translation students are not sufficiently familiar with online terminological databases, which are crucial because they are multilingual and up-to-date with the latest terminology that is usually not included in regular dictionaries. Moreover, it can also be noticed that some students do not differentiate between electronic dictionaries/glossaries and online terminological databases, and they sometimes even confuse them with Machine translation and collaborative and social translation. Further instructions are needed in this area. Specifically, this issue can be addressed by requiring students to additionally engage in preparation of terminological glossaries and in exploring new glossaries and databases in different specialised fields in order to take-on a more active role in terminology browsing (a process which should start much earlier, for example during courses attended in fourth, fifth and sixth semester).

In addition, some students indicate that they no longer use hard-copy dictionaries and mainly rely on those in electronic form (17%), but it is surprising that a large number of students (36%) are not familiar with and do not use multilingual terminological databases. This is a significant weakness that needs to be surpassed. Only one student never uses dictionaries and glossaries in electronic form because he/she only relies on hard-copy

dictionaries (2%). The questionnaire also reveals that 91% of students have completely abandoned dictionaries on CDs, whereas 9% rarely use them anymore. To conclude, students must also be encouraged to use multilingual terminological databases to a greater extent in the form suggested in the paragraph above. Furthermore, even though many students are quite familiar with online sources of information, many are not able to indicate any topic-related online glossaries. This weakness must be improved through practice. Other students prefer to use European or national institutional glossaries with specialised terminology in different topics (found online). Glossaries play a crucial role in the translation process, as translators constantly come across numerous terms and phrases that must be recorded and reused another time and must be used in a harmonised manner, thus saving time and energy every time one translates in the same topic. One way of addressing this issue is by using terminology management software in order to prepare personal specialised glossaries and thus overcome the gap in bilingual subject-related dictionaries, or their absence. As a result, the questionnaire further examines whether translation students create their personal glossaries.

The analysis of the results also shows that 55% of surveyed students create their own glossaries with subject-specific terminology, whereas 45% have not developed this practice yet. Students must become aware of the importance of glossaries as useful tools with long-term benefits, and they need to be encouraged to create glossaries by using terminology management software and to avoid creating them in Word or Excel formats because these can be easily deleted.

Consulting other translators is also very important, whether one questions an expert in a specific field or one of one's peers. The next figure shows whether translation students consult translation forums for opinion, especially when they are unable to find terminological solutions.

Figure 7 Consulting translation forums

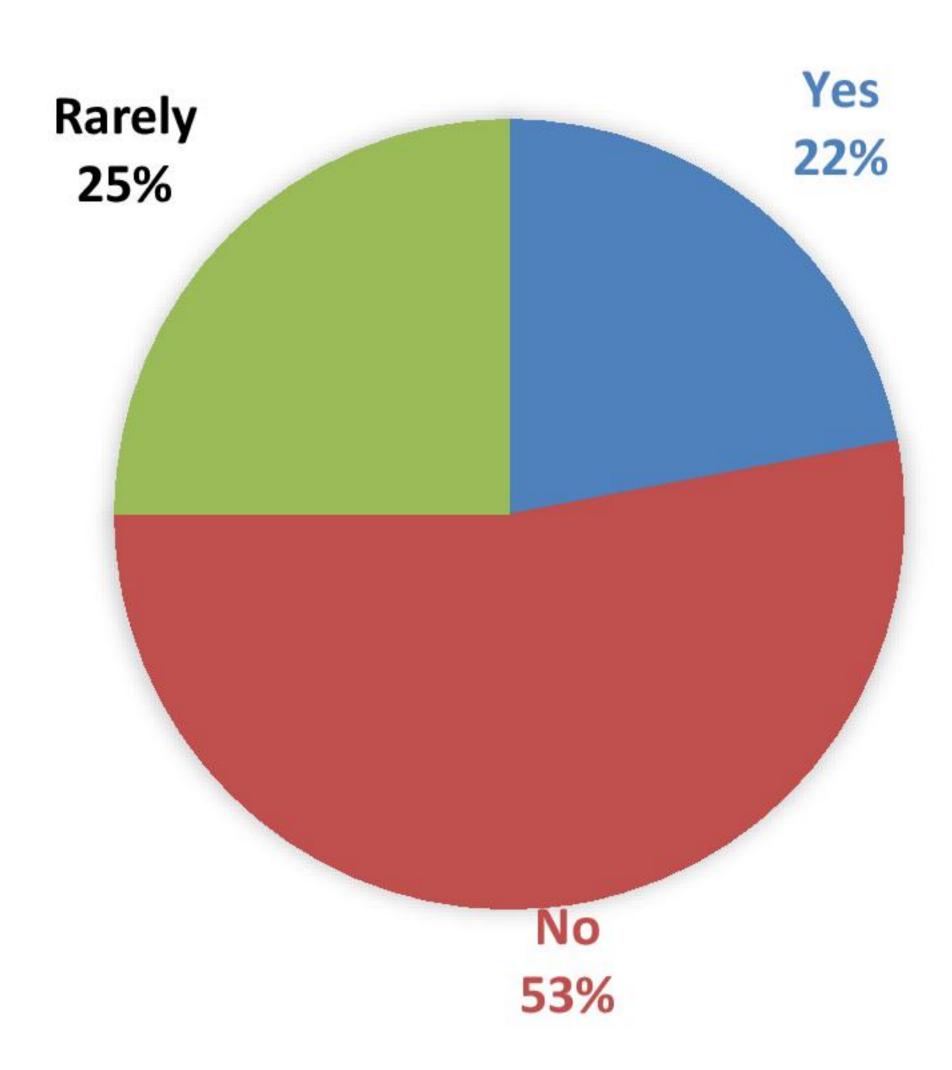


Figure 7 shows that only 22% consult translation forums when faced with a dilemma, compared to 25% who rarely consult them and 53% who do not consult translation forums. When asked to explain why they consult and trust translation forums, students explain that they read discussions and thus learn new information, resort to forums in order to discuss various translation problems, and to share ideas when they cannot find a translation equivalent anywhere else. Those who are not in favour of using message boards explain that such forums are not useful or reliable, and some would rather consult a colleague they personally know. The results however show that a small percent of students consults forums with different but unreliable opinions, but do not create personal glossaries and do not consult terminology in other foreign languages. However, consulting other languages in the search for terminology is a key skill for translation students. Comparing ideas and translation solutions as well as knowledge of other foreign languages is a must and a necessity, and therefore should be promoted and exercised during classes as a results of the department's two-module system. The figure below presents the results on whether students consult other foreign languages when they translate.

Figure 8 Consulting other foreign languages

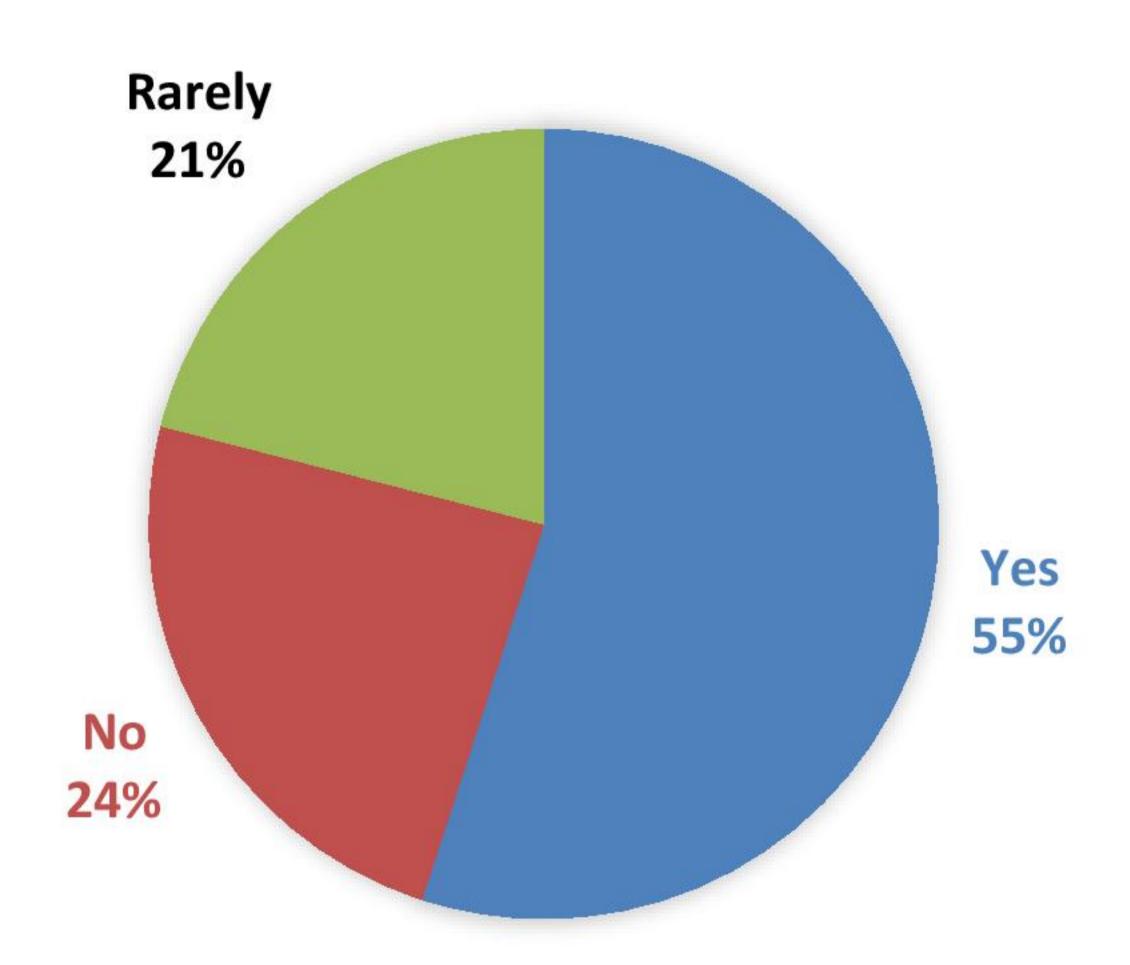


Figure 8 reveals that, when searching for terminology, 55% of surveyed students compare terminology in other languages as well (whether through multilingual glossaries, terminological databases or browsing). 24% do not consult other foreign languages, whereas 21% rarely do. Knowledge of a second or third foreign language is very useful, whereas students must also avail knowledge of related languages. The results show that translation students most frequently consult their second foreign language (in their chosen two-module language combination), namely German (25%) and French (17.5%), related languages of neighbouring countries, such as Serbian (22.5%), Croatian (22.5%), Slovenian (22.3%), as well as other unrelated languages they are familiar with: Spanish (7.5%), Italian (7.5%), Russian (7.5%), Turkish (7.5%), Albanian (7.5%) and Bulgarian (7.5%). This is a significant advantage, and other translation students must be encouraged to expand their foreign language knowledge. It is also certainly much more reliable than resorting to MT.

6. Conclusions and Recommendations

The results of the quantitative and qualitative analysis point out some of the translation students' strengths and weaknesses, and on the basis thereof it is possible to make recommendations not only for improvement of their level of familiarisation with translation tools and quality of translations, but also for strengthening the translation teaching methodology. The survey results show that although many students understand the benefits

of using translation tools, not all students are aware of the active role of translation tools and resources in the translation process. This means that students must be additionally stimulated to explore new types of translation tools and resources and to increase the practical use of these materials inside and outside of the translation classroom. Therefore, the learning-bydoing method must be applied and the student-centred approach must be strengthened. The first conclusion is that translation teaching methodology must be enhanced with browsing and information mining skills. The survey results show that some students are well aware of the importance of information mining when translating, but they are not entirely able to search for reliable and accurate information, whether of terminological or specialised nature. A tendency for inaccuracy can be observed through students' translation assignments, both in terms of inaccurate facts and unreliable terminology. In-depth research is a key element of the translation process that contributes to accuracy, reliability and precision of the information presented in specialised or technical translations. It is safe to recommend for translation students to actively engage in exploring useful information mining methods, and thus improve their browsing skills. If students understand that it is important to do extensive research while translating, they will depart from traditional habits and realise that the translation process goes beyond automatic insertion of translation equivalents that are easily found in dictionaries. This means that it is necessary to adopt a more "systemic approach" (Kiraly, 1995, p. 18) in translation training, and thus to integrate "collaborative work with trainees towards learning goals" (Kelly, 2008, p. 109).

Additionally, as far as students' skills to use translation tools are concerned, the results show that the most commonly used translation tools among translation students are electronic dictionaries and glossaries. However, they must become more familiar with other translation tools available for translators, and they need to be much more informed about useful and available specialised resources (apart from websites) in order to get reliable and accurate information, facts and terminological solutions. In this way, translation will not be regarded as "a one-dimensional view of the process of translation" as defined by Kiraly (1995, p. 19) or "direct mechanical replacement of linguistic elements in the target language" (Kearns, 2006, p. 36). Furthermore, although translation students appear to be well aware of the benefits of translation software, these tools are insufficiently used in practice. But what is especially alarming, is that some students even stated that although they are familiar with the use of CAT tools and terminology management software, they do not use them in practice.

This means that they must be stimulated to use them practically in the translation classroom. Concerning the type of tools and resources used, translation students mainly use general dictionaries and glossaries compared to only a small number who mainly use specialised dictionaries and glossaries. This is unfavourable because in the translation classroom they mainly deal with specialised and technical translations, which require adoption of skills for searching highly complex and specialised terms and phrases. They need greater familiarisation with and inclusion of specialised dictionaries in practice. Also, a tendency of avoiding active online browsing for terminology is observable among translation students, as they mainly use bilingual dictionaries (and glossaries) that offer ready-made translation equivalents. This is passive, so students must be encouraged to use multilingual terminological databases to a greater extent. This means that the teacher must not allow "a passive role for translation students" and thus eliminate "dependence on the teacher-centred performance magistrale in the translation classroom" (Kiraly, 1995, p. 19).

Lastly, translation students should be encouraged to compare terminology in other languages as well, as knowledge of a second or third foreign language or related languages is very useful. Some students create their own glossaries with subject-specific terminology, whereas many still have not developed this practice yet. Students must become aware of the importance of glossaries as long-term useful tools, especially through use of terminology management software.

On the basis of the conclusions, several recommendations can be made for improvement of the translation teaching methodology by reinforcing additional translator competences (in addition to translation theory and practice covered). Firstly, translation students must develop strong competences to engage in information mining and checking website-content reliability. Furthermore, the translation training curriculum must foresee everyday use of translation tools and resources during several semesters (for example, at least four semesters) as well as increased use of terminology management software as a means of addressing the currently identified lack of bilingual subject-related dictionaries. And last but not least, the translation program must be aimed at more narrow subject-related specialisation of students (rather than just at raising awareness on this issue).

ANNEX 1

QUESTIONNAIRE

ON THE USE OF TRANSLATION TOOLS AND IDENTIFYINGTRANSLATIONSTUDENTS SKILLS AND PRACTICES

Please answer the questions below by choosing the option that mostly refers to you, and by explaining your opinions on the blank lines. 1. INFORMATION MINING ABILITY 1. In your experience, do you think that information mining is an important segment of the translation process? A. Yes B. No
I. INFORMATION MINING ABILITY 1. In your experience, do you think that information mining is an important segment of the translation process? A. Yes
1. In your experience, do you think that information mining is an important segment of the translation process? A. Yes
1. In your experience, do you think that information mining is an important segment of the translation process? A. Yes
translation process? A. Yes
A. Yes
B. No
C. Depends on the situation
Please explain:
2. What kind of information do you personally search for when translating?
3. Do you search for online information?
A. Yes
B. No
C. Depends on the situation
Please explain what type of online sources you use when translating:
4. Do you refer to specialised subject-related literature when translating (such as, publications,
brochures, books, textbooks, manuals, reports, etc.)?
A. Yes, in particular:
B. No
C. Depends on the situation
Please explain your reasons for using specialised literature as a source of information when translating:

II. USE OF CAT-TOOLS

B. No

A. Yes, in particular: B. No C. I know how to use CAT tools, but I don't use them Please explain how you benefit from CAT tools when translating: 6. Do you use terminology management software in the translation process?
C. I know how to use CAT tools, but I don't use them Please explain how you benefit from CAT tools when translating:
Please explain how you benefit from CAT tools when translating:
6. Do you use terminology management software in the translation process?
A. Yes, in particular:
B. No
C. I know how to use terminology management software, but I don't use it
<u>Please explain how you benefit from terminology management software when translating:</u>
III. USE OF OTHER TYPES OF TRANSLATION TOOLS AND RESOURCES
7. Do you usually search for translation equivalents in general dictionaries or in specialised subject
related dictionaries?
A. I usually use general dictionaries, in particular:
B. I usually use specialised subject-related dictionaries, in particular:
8. Do you usually search for translation equivalents in classical hard-copy dictionaries?
A. Yes, in particular:
B. No
C. Rarely
Please explain what type of dictionaries you use (e.g. monolingual, bilingual, trilingual dictionaries
dictionaries of idioms, collocations, synonyms, visual dictionaries, etc.):
9. Do you search for terminology in online/electronic glossaries and dictionaries?
A. Yes, in particular:
B. No
C. Rarely
10. Do you search for terminology in (online) terminological databases?
A. Yes, in particular:

C. Rarely
11. Do you create your own terminological glossaries that assist you in the translation proc
A. Yes, in the following language combinations:
B. No
In which format do you create them (Word, Excel, Multi-term, etc.):
12. Do you consult or actively participate in translation forums, groups, networks or platforms?
A. Yes, in particular:
B. No
C. Rarely
Please explain how you benefit from them when translating:
13. Do you use dictionaries on CD?
A. Yes, in particular:
B. No
C. Rarely
Please explain how you benefit from them when translating:
14. Do you find knowledge of a second or third foreign language useful when translating or searching
for terminology?
A. Yes, in particular:
B. No
C. Rarely
15. Do you rely on Machine Translation?
A. Yes, in particular:
B. No
C. Rarely
Please explain how you benefit from Machine Translation:

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