# READING THE PROFESSIONAL TEXTS IN FOREIGN LANGUAGES – KEY SKILL FOR DOCTORAL STUDENTS AT TECHNICAL UNIVERSITIES

## <sup>a</sup>DARINA VEVERKOVÁ

Institute of Foreign Languages, Technical University in Zvolen, T. G. Masaryka 24, 960 53 Zvolen, Slovakia email: <sup>a</sup>darina.veverkova@tuzvo.sk

Grant: 010TU Z-4/2017 (Cultural and Educational Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic)

Name of the Grant: Developing the Reading Competency and Teaching Technical Foreign Languages at Technical Universities

Abstract: Nowadays doctoral students at technical universities in Slovakia need to master the language skill of reading comprehension in order to be able to read professional texts in foreign languages, especially in English. Consequently they can receive the latest information concerning their study and research from foreign experts and specialists. The submitted paper deals with reading comprehension as the key skill for the doctoral students and it brings results of the pilot questionnaire survey, carried out on the sample of 30 doctoral students from the Technical University in Zvolen, Slovakia.

Keywords: reading comprehension, technical universities, doctoral students, foreign languages, questionnaire survey.

### 1 Introduction

Today the necessity of mastering English language is more than clear in European countries, as well as all over the world. This need is closely related to the fact that English has become a sort of *lingua franca* in today's society, and it is a basic tool for communication in the sphere of work, studies, travelling, entertainment etc.

In the Slovak Republic, the graduates from technical universities need to master foreign languages at a high level to improve once their position at the labour market. During their university studies, they choose predominantly English as their first foreign language (it is partially due to their personal preference for this language, due to the fact that they clearly see its importance as the world language, as well as due to the Slovak legislation imposing English as an obligatory first foreign language for the students of the primary and secondary schools). Technical universities students study general, but mainly professional foreign languages, i.e. foreign languages used in the sphere of science, research or work. The ability to master professional languages opens many possibilities for them already during their studies and definitely after the graduation, when they start searching for a good and interesting work position.

At the Technical University in Zvolen, professional foreign languages are taught by the teachers from the Institute of Foreign Languages. Three professional languages are available to be selected from by the students of the University: English, German and French. If interested, the students may attend the courses of Chinese language, too, but they are focused on acquisition of general Chinese only.

The majority of the students select English, for the reasons that we have already mentioned above, but a lot of them understand the advantage of mastering more than just one language (especially the professional ones) for their future career. The students study professional languages related closely to their study specialisation during the specialised seminars. However, especially during the postgraduate studies (doctoral studies), they use professional foreign languages also within the study of other subjects, where they benefit from foreign literature and complement their knowledge with current information from foreign experts.

According to the surveys we did (Veverková, 2013; Veverková, Balážová, 2014), we may sum up that the higher year of studies the students are in, the more they read professional texts in foreign languages. The aim of this paper is to present the results of the pilot questionnaire survey focused on doctoral students and their relationship to reading professional texts in foreign languages (Do they read this type of texts? Which foreign

languages are preferred? How much time do they spend reading? Are the professional texts in foreign language necessary for the students or not? etc.). We consider professional texts in foreign languages to be an important source of the up-to-date and valuable information that can be used by the students in their work and scientific research. The pilot questionnaire survey was conducted on the sample of 30 doctoral students at the Technical University in Zvolen.

## 2 Reading comprehension – a key skill for doctoral students

In this chapter, we would like to explain in more detail why we consider reading to be essential skill for the doctoral students. According to Grabe (1991, p. 375), reading is probably the most important skill for foreign language learners in academic contexts because they must acquire a lot of knowledge which they are supposed to take advantage of and use in their career. Reading is the ability to understand the text, to get meaning from the written, as well as unwritten (reading between the lines), to acquire important information from the text and to benefit in some way from it. As one of four basic language skills, learners of English deal with it from the beginning of the process of studying English and they develop it gradually all over their life.

Grabe (1991, pp. 378-379) defines fluent reading as:

- rapid (a reader needs to maintain the flow of information at a sufficient rate to make connections and inferences vital to comprehension);
- purposeful (a reader has a purpose for reading);
- interactive (a reader makes use of information from his/her background knowledge as well as information from the text);
- comprehending (a reader expects to understand what he/she is reading);
- flexible (a reader employs a range of strategies to read efficiently);
- gradually developing (a reader does not become fluent immediately after a reading development course. Fluent reading is the product of long-term effort and gradual improvement).

Reading is also the foundation of language education, whether it is mother tongue or foreign language (Krashen, 2004, p. 1). Krashen (2004, p. 17) proposes that "more reading results in better reading comprehension, writing style, vocabulary, spelling, and grammatical development". The ability of reading well in the first language is helpful for the second language acquisition, too (Krashen, 2004, p. 148).

In simple terms reading comprehension is an active and complex process, during which a reader tries to understand a written text. If the readers want to be successful in reading and to read efficiently, they must master the language at the needed level, as well as different skills and strategies necessary for the process. Grabe (1991, p. 379) focuses on the complexity of the whole process of reading and presents 6 general component skills and knowledge areas:

- Automatic recognition skills;
- Vocabulary and structural knowledge;
- Formal discourse structure knowledge;
- Content / world background knowledge;
- Synthesis and evaluation skills / strategies;
- Metacognitive knowledge and skills monitoring.

According to him (Grabe, 1991, pp. 378-379) the efficient reader uses the following strategies when reading: adjusting the reading speed, skimming ahead, considering titles, headings, pictures and text structure information, anticipating information to come, etc. Hosenfeld (1977) agrees when declaring that the efficient reader, in the process of reading, focuses on the meaning of the

text as a whole, anticipates the content, does not pay attention to minor information and so on.

Other experts on reading comprehension Dudley-Evans and St. John (1998, pp. 96-98) consider the following skills important and needed to be mastered by efficient and successful reader of the text in foreign language:

- selecting what is relevant for the current purpose;
- using all the features of the text such as headings, layout, typeface;
- skimming for content and meaning;
- scanning for specifics;
- identifying organisational patterns;
- understanding relations within a sentence and between sentences;
- using cohesive and discourse markers;
- predicting, inferring and guessing;
- identifying main ideas, supporting ideas and examples;
- processing and evaluating the information during reading;
- transferring or using the information while or after reading.

Both authors consider the skills of skimming and scanning useful at first stages of reading, when the reader decides whether to read the text or which part of it. If he/she decides to read it, the reader reads carefully, extracts meaning and considers the author's attitude (Dudley-Evans, St. John, 1998, p. 98).

Reading is surely a very important language skill which opens the possibilities for subsequent education and studies. It must be supported and developed in foreign languages to the same degree as it is in the mother tongue. If the students want to become efficient and fluent readers, the acquisition of the abovementioned reading skills and strategies will be definitely useful.

# 3 Results of the pilot questionnaire survey

The questionnaire was proposed to and filled in by a group of 30 doctoral students from the following faculties of the Technical University in Zvolen, Slovakia:

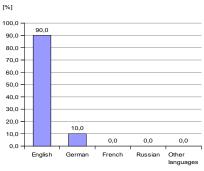
- Faculty of Forestry (15 students, i.e. 50% of the respondents);
- Faculty of Wood Sciences and Technology (10 students, i.e. 33.3% of the respondents);
- Faculty of Ecology and Environmental Sciences (5 students, i.e. 16.7% of the respondents).

From all the addressed doctoral students, 50% were women. The usual length of doctoral studies at the Technical University in Zvolen is from 3 to 5 years (it depends on the form of doctoral studies). From our respondents, 10 of them were in the first year of their doctoral studies (33.3% of the total number), 6 of them were in the second year of the studies (20% of the total number), 12 were in the third year (40% of the total number), one student was in the fourth year and another one in the fifth year of their studies.

The first question of the questionnaire "Do you read professional texts in foreign languages?" was answered unequivocally positively: all the respondents answered "Yes" (100%). This answer was expected, as far as the need of studying materials in foreign languages is taken for granted at this degree of university studies.

The second question dealt with the choice of the foreign language the students read the texts in: "In which foreign language do you read professional texts?" The students could choose from the following options:

- a) English
- b) German
- c) French
- d) Russian
- e) Other: ... (please, specify)

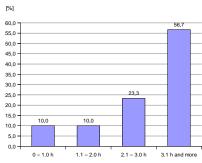


Graph 1: Preference of foreign languages by doctoral students.

As we can see on the graph, the answers were limited to two languages: 90% of the respondents (27 students) read English professional texts and 10% (3 students) prefer German professional texts. We believe that this result is related to the position of English as a communication tool among the scientists all over the world. Therefore, English is preferred also by Slovak doctoral students and their supervisors.

The third question was focused on the amount of time the students spend reading the professional English/German texts: "How much time (on average) do you spend reading professional texts in foreign languages weekly?" We proposed the following possibilities to be chosen from:

- a) 0 1.0 h
- b) 1.1 2.0 h
- c) 2.1 3.0 h
- d) 3.1 h and more

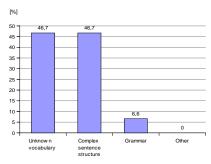


Graph 2: Amount of time spent weekly on reading professional texts in foreign languages by the students.

The majority of the respondents (17 students, i.e. 56.7%) spend 3.1 and more hours reading professional texts in English or German. More than 2 hours, but less than 3 hours are spent weekly on reading in case of 7 students (23.3%). Just a minority of the students (10% of them, i.e. 3 students) read more than 1 hour, but less than 2 hours. The same number (10%) stands for the students who read less than one hour a week.

Our intention was also to find out what the biggest problem or difficulty is when reading professional texts in foreign languages. To the fourth question "What is the biggest problem when reading the professional texts in foreign language?" we proposed the following answers:

- a) unknown vocabulary
- b) complex sentence structure
- c) grammar
- d) other: ... (please, specify)

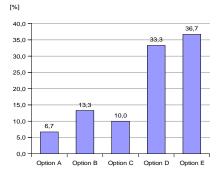


Graph 3: Occurred problems while reading professional texts in foreign languages.

From the results we can see that the students' problems reside mainly in lexical and syntactical fields. Unknown vocabulary, as the biggest barrier to reading, was marked by 14 students (i.e. 46.7% of the respondents). The same number (14 students – 46.7% of the respondents) chose complex sentence structure as the most serious difficulty in the process of reading. Finally, only 2 students (i.e. 6.6%) considered grammar a problem.

"To which extent do you need to search for and read professional texts in foreign languages during your doctoral studies? (e.g. when writing your doctoral thesis, preparing for the exams etc.)" was the fifth question in our questionnaire. The respondents could choose one of these options:

- a) Professional texts in foreign languages are only of peripheral importance for me (I read them rarely, only from time to time).
- b) I sometimes read professional texts in foreign languages; I read Slovak professional texts predominantly.
- c) I read professional texts in Slovak and in foreign languages to the same degree.
- I read more professional texts in foreign languages than the Slovak ones.
- e) I read only or most predominantly professional texts in foreign languages; I read only minimally the Slovak texts.



Graph 4: The answers to the question "To which extent do you need to search for and read professional texts in foreign languages during your doctoral studies?"

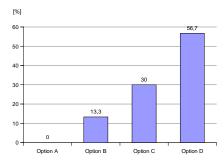
The most frequent answer of the respondents was the option E: I read only or most predominantly professional texts in foreign languages; I read only minimally the Slovak texts (the option was chosen by 36.7% of respondents, i.e. 11 students). The second most often selected option was D (I read more professional texts in foreign languages than the Slovak ones), which was chosen by 10 students (33.3% of the respondents). We can sum up that professional texts in foreign languages are preferred to the Slovak ones and used by altogether 70% of doctoral students from the research sample. This proves their importance and necessity and highlights the need for mastering the skill of reading comprehension.

10% of the students (3 of them) read professional texts in Slovak and in foreign languages to the same degree. Slovak texts are preferred to the texts in foreign languages by 13.3% of the

respondents and only 2 students (i.e. 6.7%) read professional texts in foreign languages only peripherally.

The last question was related to the previous one: "Are there enough sources of information in Slovak language concerning your research topic or do you have to search for necessary information in the professional literature written in foreign languages?" Our aim was to find out if there are enough sources – professional or specialised literature (professional texts, papers, books, other sources of information etc.) in Slovak language concerning the students' research topic. The respondents could mark one of these options to express their opinion:

- Yes, there are enough sources of information and I do not need to study or look for professional literature in foreign languages.
- b) Yes, there are enough sources of information, but I like to add some information from the professional literature in foreign languages.
- No, there are not enough sources of information, I have to look for information partially in professional literature in foreign languages.
- No, there are not enough sources of information, I have to look for information to a large extent in professional literature in foreign languages.



Graph 5: The answers to the question "Are there enough sources of information in Slovak language concerning your research topic or do you have to search for necessary information in the professional literature written in foreign languages?"

The respondents' selection of the answers proved that doctoral students are aware of the necessity of mastering foreign languages because they are a tool to gain new and useful information in the sphere of science and research. More than half of them (17 respondents, i.e. 56.7%) chose the option D to answer this question, admitting that when doing their research, they rely mainly on literature written in foreign languages. 30% of the respondents chose the option C, which again supports the statement that professional literature in foreign language is a common part of the doctoral students' work. Only 13.3% of the students find enough information for their work in Slovak sources, but they still find English or German professional literature as relevant. None of the students chose the option A. Following these findings, we can conclude that the doctoral students from our sample benefit from mastering foreign professional languages and consequently they are able to gain important information for their scientific and research work from foreign literature.

# 4 Conclusion

Doctoral students usually read the professional texts in foreign languages in order to improve their language skills and to get current information related to the sphere of their interest. Being an efficient reader is closely related to mastering the foreign language at a high level, as well as mastering reading skills and strategies. The results of the pilot questionnaire survey showed that doctoral students at the Technical University in Zvolen consider professional texts in foreign languages an inseparable

part of their studies and they very often preferred them to the Slovak ones. More than half of the respondents spend at least 3 hours a week reading the English / German professional texts. Unknown vocabulary and difficult sentence structure present the biggest problem for the students. Nevertheless, the professional literature written in foreign languages remains the important source of knowledge and therefore reading comprehension deserves full attention of the foreign languages teachers.

### Literature:

- 1. Dudley-Evans, T., St. John, M. J.: Developments in English for Specific Purposes: A Multi-Disciplinary Approach. Cambridge: Cambridge University Press, 1998. ISBN 0-521-59675-0.
- 2. Grabe, W.: Current Developments in Second Language Reading Research. In *TESOL QUARTERLY*, Volume 25, Number 3, 1991, pp. 375-406. ISSN 0039-8322.
- 3. Hosenfeld, C.: A Preliminary Investigation of the Reading Strategies of Successful and Non-successful Second Language Learners. System, 5 (2), pp. 110-123, 1977.
- 4. Krashen, S. D.: *The Power of Reading: Insights from the Research.* Second edition. Portsmouth: NH Heinemann, 2004. ISBN 1-59158-169-9.
- 5. Veverková, D.: Čítanie s porozumením odborných cudzojazyčných textov na vysokej škole technického zamerania. In *Cudzie jazyky v slovenskom vzdelávacom systéme a politika viacjazyčnosti v Európskej únii.* Zvolen: Technická univerzita vo Zvolene, 2013, pp. 93-102. ISBN 978-80-228-2533-7.
- 6. Veverková, D., Balážová, Ž.: Efektivita práce študentov vysokej školy technického zamerania s odbornými anglickými textami. In *Od textu k prekladu IX*, Praha, 2014, pp. 221-239. ISBN 978-80-7374-119-8.

**Primary Paper Section:** A

**Secondary Paper Section: AM**