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Professional Study Material for Foreign Language Teaching in Advanced Manufacturing Technologies Students

Marta Gluchmanova
PhD., Faculty of Manufacturing Technologies in Prešov Technical University of Košice, Slovakia, *marta.gluchmanova@tuke.sk*

Universities aim to prepare students for their future careers. An important role is also played by foreign language teaching. The study's purpose was to point out the lack of professional foreign language study material for newly accredited study programmes at the Technical University in Košice. Foreign language teachers at the Department of Social Sciences and Humanities were looking for innovative forms within foreign language teaching. Mixed methods were used to improve communication skills in advanced manufacturing technologies students in a hybrid form of education. This study aimed to find out whether students of manufacturing technologies will achieve different results in tasks related to the professional study material Plasma Cutting, as well as whether the results will differ within their study programmes. The research sample consists of 185 students in the 2nd year of bachelor's study in the winter semester of 2021. The best results were achieved by students of the Smart Technologies in Industry (A-assessment - 45,2%) and Intelligent Technologies in Industry (A-assessment - 43,3%). Strengths and weaknesses were revealed by teachers. Students enriched their language competencies, which they could apply as engineers, computer programmers, managers, and technicians in foreign companies.

Keywords: terminology, advanced education, professional texts, e- tasks, teaching

INTRODUCTION

The *Distance Learning* portal was established as a tool for the contact between teachers and students at Slovak universities. The purpose of the portal is to help pedagogical and professional staff, management, as well as students, and parents find specific solutions and methodological support in this extraordinary situation. I believe that, despite the problem of teaching during a pandemic situation, ways need to be found to activate the teacher-student relationship and innovate learning practices. Technical solutions at universities, as well as Internet technologies, have now become very up-to-date and used in modern classrooms in Slovakia. Teachers are expected to combine traditional and virtual education. The teaching of a foreign language is connected to the Internet starting with the amount of authentic material available, web pages where teachers place lesson

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plans during the semester, ideas, inspirations, and worksheets used by foreign language teachers and students during lessons, as well as outside.

In this regard, foreign language teachers at the Faculty of Manufacturing Technologies (FMT) have found that the often available professional literature for teaching a foreign language does not meet the general requirements of a professional foreign language that are imposed on their students. Many professional publications (Glendinning, 2008; Glendinning, 2009; Tomlinson, 2011) were suitable for students only to a certain extent because they did not contain enough professional study material for students of various newly accredited study programmes at the faculty. The language teaching at the FMT aims to improve the language level of students in the field of manufacturing technologies. Teachers focused mainly on such professional texts that would improve students' language communication skills within their study programmes. This was the main goal in the initial phase of experimental research.

Literature review

In general, the introduction of new practices - such as modern classrooms and blended or hybrid learning - are part of the greater interaction between teachers and students. These current innovations have become a necessity of modern study programmes as well as the professional study material in higher education institutions. Fernandez-Malpartida, W. M. (2021) states that many universities have cancelled their face-to-face classes, and examinations and are implementing fully online programs. Active users point out many of its benefits (Sharma & Barret, 2007). Some people may feel it like a new concept, but hybrid learning has been in place in the language teaching process at the Faculty of Manufacturing Technologies for a few years. Blended or hybrid learning is part of many English language lessons at the Department of Natural Sciences and Humanities at the FMT. A similar situation prevails in teaching during a pandemic in many other countries. Mantasiah et al. (2021) argue that each country applied some strategies in the educational sector. In her country, the policy of School from Home (SFH) regulated all learning processes not conducted at school, but at home online. Ivanova and Ivanov (2021) note that "the modern learning process is more likely to take place in an online environment and according to them the 21st-century education tends to be guided by the principles and technologies of e-learning" (p. 714).

Combined learning has brought many benefits, such as autonomous foreign language learning, interactions between students are increased, as well as greater flexibility in many teaching methods (Smith & Hill, 2018; Khonamri et al., 2020; Fu & Wang, 2021; Gutiérrez-Colón & Somsivilay, 2021). I really appreciate it when the teaching of technical foreign language study material can be supported using, for example, audio or video, which serve for a better understanding of the topics. Bilotserkovets and Gubina (2019) stress that "teachers should use ICTs, so they will be more connected to their students; teachers, in their turn, believe that ICTs are relevant to millennial students because they use smartphones, computers, and the Internet for daily basis" (p. 26). I agree that computers and the internet generally increase students' motivation. The next study underlines that English for specific purposes can be very effective, especially in the training of technical major students. Kotlyarova and Chuvashova (2021) state that

"students were provided with an opportunity to introduce acquired language skills into their future professional career when performing such professional tasks as the development of design and technological documentation which is a real and basic job function" (p. 303).

I believe that it is not just about current information from the field of science and technology. In the case of our students, it is mainly from the areas of traditional and advanced production technologies, but also by offering various new activities that are popular among students in the sense that they combine them with fun and play. This makes students more independent.

The advantage of using the Internet to study foreign language professional texts lies in the authenticity of the study material (Drach, 2018; Pejović, 2020), but also in the fact that these professional materials are available to students non-stop not only in the school environment but also during self-study outside universities. The Internet provides effective interaction not only between teacher and student but also between students and each other. Mawan et al. (2017) note that "with the rapid growth in internet technology e-learning implementation becomes more advanced. Internet accessibility is one of the major factors that contribute to the successful implementation" (p. 2). By using the Internet, students could learn new facts compared to older editions of books, textbooks, or scripts. They are not limited to one source of study of a given issue and information. Robroo (2019) found that "overall attitude is at the highest level because learners realize that learning through electronics media is beneficial for themselves" (p. 803). In my opinion, the study of foreign language professional resources using the Internet should be encouraged.

As many authors pointed out, the hybrid form of teaching brings the need for extensive use of ICTs. Other authors (Putri & Jumadi, 2020; Ma et al., 2020) share the same or very similar views on the use of hybrid learning and the Moodle system in teaching. Foreign language teaching aims to understand the content of a professional text, its structure, and function. Rodrigues (2015), as well as Hanifa (2017), are supporters of an innovative approach in the preparation of professional study material. They emphasize that students will show more interest in relevant professional texts as well as useful information using the Internet. The Internet has the potential to be a source of current and interesting study material that would serve students of various study programmes. Hrdličková (2021) states the lack of suitable foreign language study material at Slovak universities. I fully agree with this statement, and I can confirm this fact from my own experience.

Foreign language teachers at the Department of Natural Sciences and Humanities, Faculty of Manufacturing Technologies in Prešov used hybrid education much earlier than the pandemic forced us to teach from our living rooms. The use of the university-wide Moodle platform (Fikar, 2011) has become a priority for FMT teachers and students. The Faculty Portal *EnGeRu for Technicians* (Figure 1) is used to teach foreign languages and work with professional study material (Gluchmanová, 2019).

Figure 1
Sample of professional topics in Moodle

The study of three foreign languages is offered by the faculty. Students are most interested in English. Some students choose German or Russian as compulsory or optional subjects. We focus mainly on professional foreign language study materials in English. *Essential English I for Students of the Faculty of Manufacturing Technologies* includes a technical English course for students (Gluchmanova, 2018). The scripts are designed to allow the development of basic communication skills (listening, reading, writing, speaking) needed for practice and business activities based on functional structures typical for technical English. The Moodle platform EnGeRu for Technicians is complementing these scripts. The platform includes 110 topics, most of them with manufacturing technology issues. Students prefer teaching technical materials which is closely connected with their study programmes, such as Automotive Production Technologies, Computer-Aided Manufacturing Technologies, Industrial Management, Intelligent Technologies in Industry, Renewable Energy Sources, and Smart Technologies in Industry.

This study aims to find out whether students of manufacturing technologies will achieve different results in tasks related to their study material Plasma Cutting, as well as whether the results will differ within their individual study programmes. The tasks include all language competencies. At the same time, the teacher can monitor the difficulty of individual language competencies - the strengths and weaknesses of students within tasks. These findings will be important for teachers in preparing new assignments for the next semester. Because all tasks are focused on advanced manufacturing technologies, I hypothesize that results may vary within individual study programmes. I assume that the results of the tasks will be different. Those students whose study programme is closer to the solved tasks will achieve better results.

METHOD

Research design

To fulfill the stated objective of the study, the teachers used mixed methods. Data (quantitative & qualitative) were obtained from specific tasks within the *Plasma Cutting* professional study material, which was carried out by students in Moodle system. Analysis and assessment of the findings and their feedback in Moodle provided enough data to compare the results in Automotive Production Technologies, Computer-Aided Manufacturing Technologies, Industrial Management, Intelligent Technologies in Industry, Renewable Energy Sources, as well as Smart Technologies in Industry study programmes.

Participants

The experiment took part by 185 second-year bachelor's students at the FMT in Prešov, Technical University (TU) in Košice. The research took place in the academic year 2020/2021 in the winter semester (WS) within the compulsory subject *English Language III* (EL III). The processing of the assigned tasks took place via the Moodle system, on the EnGeRu for Technicians faculty portal. E-exercises by applying language competencies (writing, listening, reading) were prepared by foreign language teachers. The Internet was the source of authentic professional study material *Plasma Cutting*. Advanced manufacturing technology issues were included in the selected tasks.

Procedure

Students at technical universities should acquire new knowledge and information from their field mainly by reading and understanding professional study material not only in their mother tongue but currently especially in English. The English language study at the FMT is often associated with a foreign language professional text understanding and then mastering the right strategies for reading, listening as well as writing the professional study material available on the Internet. During face-to-face English lessons, the teacher found out that students had a problem processing an English professional text. The reason was incorrect reading technique and weak interest of students in reading in general. Sometimes it was also a lack of interest in outdated professional texts in older editions of professional publications. Teachers have found that the Internet offers an immense number of opportunities to provide authentic and valuable professional texts from various fields of science and technology.

This was one of the reasons why foreign language teachers decided to prepare a bank of tasks with a professional foreign language text for their students. It was very closely connected with their studies, while the Internet was very helpful in this regard. Many years of experience with creating tasks within a foreign language professional study material for students at the FMT in the Moodle system showed that it is more effective to create different types of tasks for one professional text and prepare various tasks or exercises in which it is possible to practice all language competencies - reading a professional text by understanding, correct use of professional terminology in written expression, based on listening exercises they can reproduce a part of a professional topic

or practice grammar. It depends on the type of professional topic that can be applied to individual exercises. Pedagogical experience is proof that if students work with one basic professional topic, they can understand it better and they can focus on individual contexts within the topic. This will help students consolidate their language skills and technical terminology. All this results in the development and support of other competencies needed for life in today's modern and technology-supported society.

Foreign language teachers selected several professional topics for the study plans during the winter semester. They had to cooperate with teachers of professional subjects. The Internet had an important place in this regard. At the beginning of the winter semester in 2021, students received a set of selected professional foreign language topics. They worked with these topics together with the teacher, analysed them, and clarified unknown concepts. Subsequently, students deepened each face-to-face topic during the following online lesson. Online exercises were stored on the EnGeRu faculty website. Advanced manufacturing processes, including Plasma Cutting, were part of the study.

I list the types of e-exercises for our experimental group of students in working with professional study material during online classes. Foreign language teachers used authentic professional text to prepare individual tasks. Students in the second year of bachelor's study within the compulsory subject English language III developed tasks that have been prepared by teachers. Plasma Cutting is a very current topic for students and the given types of tasks are very interesting for them.

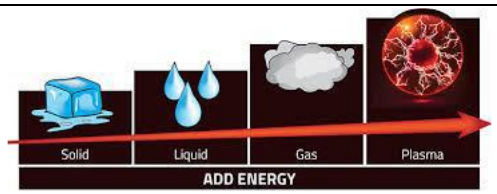
In Task 1, students watch a short video that is available on the Internet. If necessary, they are allowed to watch the video more than once (Figure 2).

Watch the following video. Then try to identify the outputs.
Use: https://www.youtube.com/watch?v=Ry4kohKGAfI

_____ *garden gate, different logos & decorations, machine parts, etc.* _____

Figure 2
Task 1

Students read a current foreign language professional text *Plasma Cutting Principle* in Task 2, The text is documented by a suitable scheme (Figure 3). Students tried to find correct equivalents in their mother tongue (in our case Slovak) to the English expressions written in italics.



Read the text *Plasma Cutting Principle*. Then try to find the Slovak equivalents to the following English ones: states of matter[1], nuclei[2], frees[3], free electrons[4], the release of energy[5], power supply[6], plasma cutters[7].
Use: What is a Plasma Cutter and How Does it Work? - PlasmaCutting.org

1. ___*skupenstvo látky*_____
2. _____
3. ___*uvoľňovať* _____
4. ___*voľné elektróny* _____
5._____
6. _____
7. ___*plazmová rezačka* _____

Figure 3
Task 2

The teacher prepared Task 3 with Wh-questions. This type of question avoids short answers: Yes or No. The purpose was to find out the correct understanding of the professional foreign language text (Figure 4).

Study the text *Plasma Cutting* and answer the following questions.

1. What is a plasma cutting principle based on? _____
2. What is the result of electrons collision? ____*A release of energy* _____
3. What happens when gas reaches the fourth state of matter? ___*Two electrons in the atoms of the plasma separate from their nuclei* _____
4. What materials can be cut by plasma cutting? _____
5. What physical property must a workpiece possess to be cut by a plasma cutter? ___*Conductivity* _____

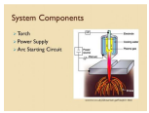
Figure 4
Task 3

In following Task 4, the teacher tried to develop students' knowledge by describing the three components. Students read the description of the plasma cutting system with the help of a picture (Figure 5) and then complete the missing correct component.

Read the description of *Plasma System Components*. Then complete the missing terminology.
Use: How a Plasma Cutter Works (lincolnelectric.com).

a) _____:

b) _____:



c) _____:

Figure 5
Task 4

In Task 5, the internet with a variety of visuals was helpful in understanding technical terminology. The task uses pictures (Figure 6) to identify the three main parts of the plasma arc generation.

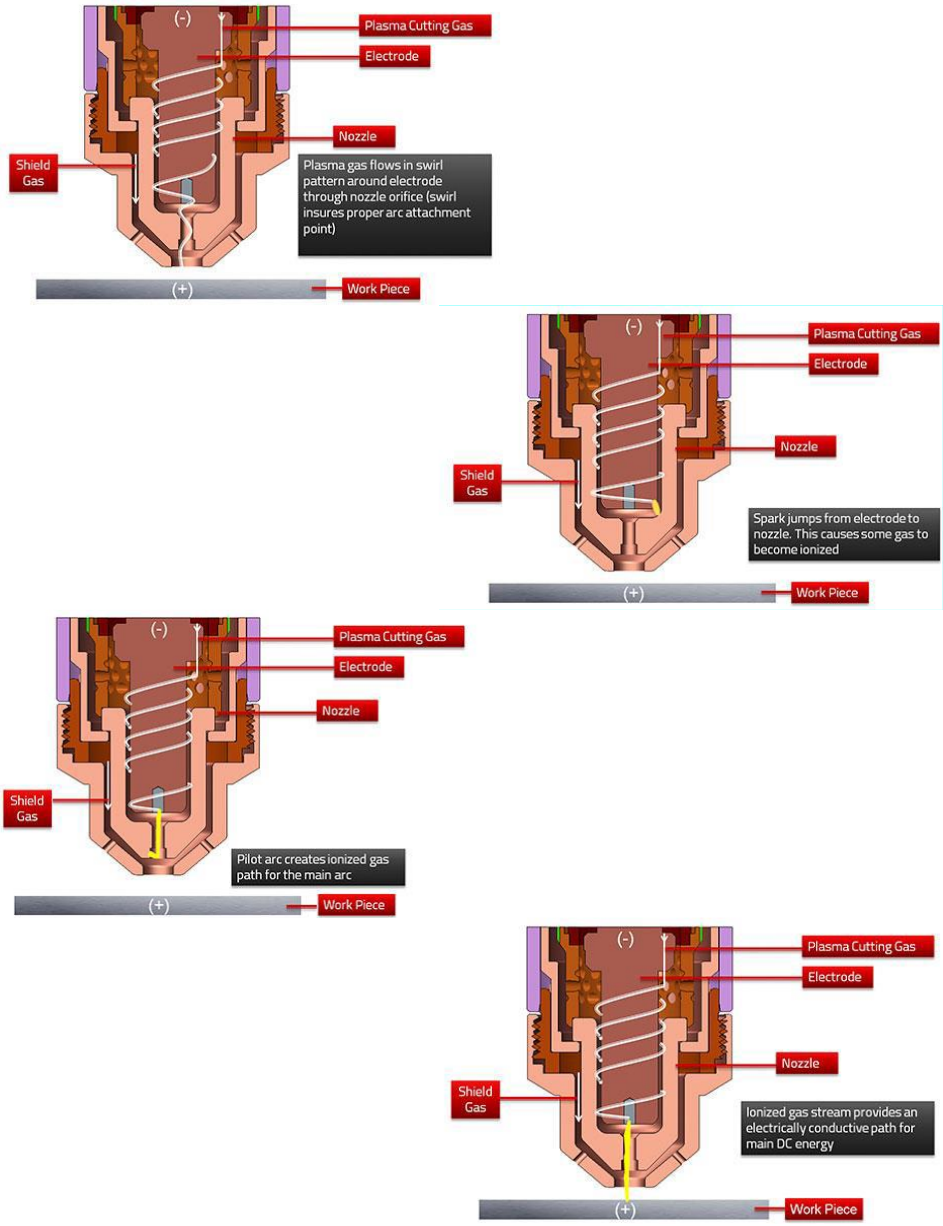
Write the correct plasma cutting terminology next to the picture: the electrode, swirl ring, and nozzle.

a) _____ b) _____ c) _____

Figure 6
Task 5

The appropriate and up-to-date text *Precision Plasma Operation* was used in Task 6 to study new vocabulary, English language professional terminology, its acquisition, application, and comparison of Slovak and English terms (Figure 7).

Read & study the text *Precision Plasma Operation*. Then write the English equivalents to the following Slovak terms.
Use: How a Plasma Cutter Works (lincolnelectric.com)



1. Dýza _____*orifice / nozzle* _____
2. Zúženie _____*constrict* _____
3. Uhol skosenia _____
4. Ochranný uzáver _____*shield cap* _____
5. Ochranná atmosféra _____
6. Intenzita elektrického prúdu _____ *amperage* _____
7. Cesta elektrického prúdu _____
8. Vetrací otvor _____ *vent hole* _____
9. Sada hadíc _____ *hose lead set* _____
10. Pomocný oblúk _____ *pilot arc* _____
11. Vírivý prúd _____
12. Jednosmerný prúd _____ *DC current* _____
13. Napätie naprázdno _____
14. Spúšťací obvod _____ *arc starting console* _____

Figure 7
Task 6

Data analysis

The analysis of experimental research data was established on statistical and mathematical methods. Data for individual tasks were evaluated at the end of the WS in 2021. Results and grades of all tasks aimed at advanced manufacturing technologies - *Plasma Cutting* - were summarized from 185 students in the 2nd year of bachelor's study in the WS 2021. Tests are evaluated automatically in the Moodle system. The teacher and the student have at their disposal the results of all evaluated tasks individually and in general immediately after the elaboration of the test. The test was used as a research method.

FINDINGS

All students who completed *English Language III* in the 2nd year of bachelor's studies at the FMT were included in the WS of 2021 in writing e-exercises. The evaluation at the Faculty of Manufacturing Technologies takes place through the European Credit Transfer System (ECTS). Each task concludes the evaluation process. The ECTS definition and performance criteria are contained in the Moodle system. They are set as follows: A (100% -91%), EXCELLENT; B (90% -81%), VERY GOOD; C (80% -71%), GOOD; D (70% -61%), SATISFACTORY; E (60% -51%), SUFFICIENT; FX (50% -0%), UNSATISFACTORY. I emphasize that the group of students involved in writing assignments had completed the study programmes (SP): Automotive Production Technologies (APT) – 31 students, Computer-Aided Manufacturing Technologies (CAMT) – 31 students, Industrial Management (IM) – 32 students, Intelligent Technologies in Industry (ITiI) – 30 students, Renewable Energy Sources (RES) – 30 students and Smart Technologies in Industry (STiI) – 31 students. In our experimental research, the exercises focused on advanced manufacturing technologies were selected

for a group of 185 bachelor students in the winter semester 2021. Depending on the focus of the tasks in the exercises, the results of students were monitored. The findings of individual study programmes students are summarized in Table 1 below.

Table 1
The grades achieved in *Plasma Cutting* tasks in WS 2021

SP	A 100-91%	B 90-81%	C 80-71%	D 70-61%	E 60-51%	FX 50-0%
APT	6 (19,4%)	7 (22,7%)	9 (29,2%)	6 (19,4%)	2 (6,5%)	1 (3.2%)
CAMT	9 (29,2%)	10 (32,1%)	6 (19,4%)	3 (9,6%)	1 (3,2%)	2 (6,5%)
IM	5 (16,1%)	8 (25%)	10 (31,1%)	4 (12,3%)	2 (6,2%)	3 (9,3%)
ITiI	13 (43,3%)	11 (36,8%)	4 (13,3%)	1 (3,3%)	1 (3,3%)	0 (0%)
RES	4 (13,3%)	5 (16,6%)	8 (26,7%)	9 (30%)	2 (6,7%)	2 (6,7%)
STiI	14 (45,2%)	10 (32,2%)	2 (6,5%)	2 (6,5%)	3 (9,6%)	0 (0%)

All students involved in experimental research have basic knowledge of manufacturing technologies. The tests aimed also to acquire professional terminology concerning advanced manufacturing technologies. The findings in Table 1 suggest that, nevertheless, there are differences in the understanding of the issues surrounding advanced manufacturing technologies. The Moodle system evaluated each student's test separately. Table 1 shows the summarized evaluation of students for each study programme within quantitative research. Based on the percentage of success of the study programme within the topic Plasma Cutting can be seen. The results in Table 1 show that the best results in the Plasma Cutting tasks were achieved by students of the Smart Technologies in Industry – EXCELLENT -14 students (45,2%) and Intelligent Technologies in Industry – EXCELLENT -13 students (43,3%). It means that students of these study programmes best mastered the issue of Plasma Cutting. Our finding that students achieve the best results in those e-exercises or tasks that are more closely related to their study programme has been confirmed. Computer-Aided Manufacturing Technologies students approach these two study programmes. "A" assessment was achieved by 9 students (29%). This can be attributed to their knowledge of some technical terms, such as CAD, CAM, CNC, AC, V, DC, etc., which occurred in some tasks. Students of Renewable Energy Sources – A assessment was achieved only by 4 students (13,3%). Finally, 5 students of Industrial Management achieved A - assessment (15,6%). They were not fully identified with the issues of Plasma Cutting. Findings have shown that students in these study programmes are more focused on the issues associated with management in the industry as well as renewable energy sources despite the fact that the issue of Plasma Cutting is part of the teaching in all study programmes.

In the Moodle system, the teacher was allowed to look at the student's exercises in the tests and the quality of processing Plasma Cutting issues within individual tasks. I believe that part of qualitative research in foreign language teaching is the opportunity to identify students' strengths and weaknesses within each task. The quality of understanding and processing of tasks is helpful for teachers in creating and processing new professional topics in the next academic year. Feedback is a tool for the student to help him understand the complexities of a professional text in many cases. The system made it possible to find out the most difficult task. Professional texts concerning Plasma

Cutting were divided into several sections and tasks. They included a video (watching & listening), descriptions (identifying & completing), Wh-questions (questions & answers) as well as professional terminology (finding Slovak or English equivalents). Understanding the assignments in the exercises is very important. The teacher must find out if the student understands what to do in the exercise. Therefore, I emphasize the competence to read and understand the text correctly. The use of audiovisual aids is very helpful in the case of professional foreign language text. Students must understand the abbreviations CAM and CNC, etc. The pictures can also be used as a teaching aid. In foreign language teaching, all this is part of qualitative research. Attention should also be paid to abbreviations in the text (AC, DC, V, ASC, MHz), as they are part of every professional style. In Plasma Cutting texts students started best with watching and listening exercises. In practicing wh-questions, the teacher has to emphasize not only the correct answer but also grammar, and the correct use of present simple and present perfect tenses. Students also practiced and mastered new professional vocabulary, professional terminology not only based on reading text, but also through descriptions, pictures, etc. The students managed this task quite well. The findings showed which of the exercises made it difficult for the students. Exercises with finding Slovak or English equivalents were the most difficult for many students. It is necessary to emphasize that the number of words in the mother tongue in professional terminology (in our case in the Slovak language) may not correspond to the same number of words in English. For example, intenzita elektrického prúdu (3 words in Slovak) - amperage (1 word in English); sada hadíc (2 words in Slovak) - hole lead set (3 words in English); spúšťací obvod (2 words in Slovak) - arc starting console (3 words in English), etc. It is also necessary to draw attention to the fact that compound words are characteristic in a foreign language professional style. This fact and the results of the e-exercises mean that the teacher will have to pay more attention to the differences in the use of foreign professional terminology in the summer semester of 2022 or later.

DISCUSSION

185 students from the FMT in the 2nd year of their bachelor's study were part of the experimental research sample in the WS of 2021. The experimental sample consisted of students in the study programmes: Automotive Production Technologies (APT) - 31 students, Computer-Aided Manufacturing Technologies (CAMT) - 31 students, Industrial Management (IM) - 32 students, Intelligent Technologies in Industry (ITiI) - 30 students, Renewable Energy Sources (RES) - 30 students, as well as Smart Technologies in Industry (STiI) - 31 students. During the WS 2021, they were included in the elaboration of e-exercises focusing on advanced manufacturing technologies - Plasma Cutting through the Moodle system at *Engeru for Technicians* faculty portal.

The process of creating the right and effective e-exercise is not easy. The preparation and organization of individual tasks are very time-consuming. It is difficult to prepare some universal professional texts for individual study programmes students. It is not easy to find a suitable publication for all students that would include professional study material for all study programmes at the Faculty of Manufacturing Technologies. It is especially challenging at technical universities. Science and technology are advancing at

a tremendous pace. As a result, many professional publications are no longer current or obsolete after a short time. This applies not only to professional publications, but also to foreign language teaching and learning, which must follow trends in the development of science, technology as well as manufacturing technologies.

The e-exercises that were selected for the students in the field of advanced technologies. The research aims to find out whether the e-exercise specification has an impact on the success of students. The assumed hypothesis was fulfilled because students achieved better results in those exercises that were closer to their study programmes. This was most pronounced in Intelligent Technologies in Industry and Smart Technologies in Industry. It is proof that these students are most interested in their field and that professional terminology does not cause them any problems. This was also reflected in the results of e-exercises. The advantage is also the knowledge of professional terminology in the field of study.

The Computer-Aided Manufacturing Technologies students approached the results. They are skilled in working with ICT, as well as international professional terminology in this field. E-exercises have made it easier for them to develop many tasks correctly. The results of e-exercises also pointed to the fact that in the summer semester of 2022, foreign language teachers need to focus more on English and Slovak equivalents of professional terminology. Compound words in a professional style are different in mother tongue and English in many cases concerning the number of words and this was a problem for many participants of the experimental research.

In some professional topics, it is difficult to choose a suitable methodology that could be suitable for all students due to the diversity of study programmes within the bachelor or engineering study. The different language levels of individual students also play a role. Dževerdanović Pejović (2020) emphasizes that, regardless of the number of recommended methods and approaches, there is no set methodology widely proven to be successful, due to different student profiles, language competencies, and the learning environment. In this context, I note that e-exercises should be precisely designed for individual study programmes. Students achieved worse results when exercises were not part of their study.

In my opinion, the use of information and communication skills to validate and measure knowledge through didactic exercises will increase in the future. Shaheen et al. (2019) state that hybrid learning is offered by various educational environments. I state that didactic exercises also have a motivating function for learning, through non-traditional construction of tasks, using basic texts oriented to practice and to real-life problem situations. Many authors stress how many figures, graphs, tables, maps, and diagrams applied in completion and assignment tasks or by using images and symbols in responses are very helpful (Putri et al., 2020; Stanojević et al., 2017; Zitinski et al., 2010). There are many possibilities, it only depends on the teacher whether he/she chooses the right approach and is able to make testing not only controlled but also a fun activity. According to Mantasiah (2021), the most used platform for working from home is Whatsapp not only for teachers but also for students and parents. The informatization of education will continue to progress and it is up to us how we adapt to this trend.

CONCLUSIONS

We are convinced that no professional English publication contains enough professional foreign language study material needed for the study programmes at the FMT. Every study programme at the FMT has tailor-made professional study material. I must emphasize that it is a very time-consuming process. The foreign language teacher must consult individual selected topics with experts in professional subjects. Teachers decided to make foreign language study at the FMT more attractive and therefore enriched face-to-face lessons with online classes. So, they started to practice a hybrid form of teaching. They also find support on the Internet. Many professional foreign language texts that are available on the Internet are highly topical. They bring students closer to the real and current world within their field as well as in terms of form and content. The Internet allows students to learn a wealth of information and gain new experiences. We can talk about a certain type of experiential learning for students. In this form of study through current and functional videos, they can also gain visual professional experience, while in the time of a pandemic they are dependent on self-study, which leads them to independence. Professional information is thus presented in a non-linear way, allowing students to develop more flexible thinking.

Students and graduates of the faculty must be proficient in working with ICTs as well as they must be proficient in at least one foreign language. Internal motivation to work should be a driving force for them to learn and approach working with professional study material responsibly. Communicativeness, creativity, adaptability, and problem-solving are very important. This represents the most important practical skills that allow the assessment of professional knowledge in real situations (Gluchmanova, 2019). Foreign language professional texts contain, for example, instructions for working with new technologies, and solving problems with machine and equipment failures, as well as students, learn about new discoveries, innovations, and technologies in general from the professional texts. The teacher should help increase students' interest in working with current and authentic professional study material. He should select professional texts that meet the students' language level criteria. It is important that the professional foreign language study material is related to the study programme and enriches their knowledge in future careers as engineers, computer programmers, managers, technicians, as well as other professions for which they are preparing during their university studies.

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