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ABSTRAKT

Tato bakalářská práce se zabývá problematikou výuky technického anglického jazyka na vysokých školách. Cílem práce je popsání a porovnání různých přístupů k dané problematice. Úvodní kapitola se zabývá analýzou přístupů k výuce obecné angličtiny. Následující kapitola popisuje přístup k výuce anglického jazyka pro účely odborného technického jazyka, kořeny a popis tohoto přístupu, jeho oblasti, v kterých se dá využít a návrh kurzů využívající tento přístup. Práce dále pokračuje popisem anglického jazyka pro akademické účely a jeho hodnocením, dále navrhuje možné aktivity, které lze uplatnit při výuce takového jazyka. Závěrem práce je analýza a porovnání dvou dostupných učebnic pro výuku technické angličtiny na vysokých školách.

KLÍČOVÁ SLOVA

výuka technické angličtiny, výuka angličtiny na vysokých školách, přístupy k výuce, aktivity pro výuku angličtiny, učebnice pro výuku technické angličtiny

ABSTRACT

This bachelor thesis deals with issues of teaching technical English at universities. The thesis aims to describe and compare different approaches to the given issue. The introductory chapter focuses on the analysis of approaches to the teaching of General English. The following chapter describes English for Specific Purposes, its roots and description, its areas, where this approach is usable, and course design of English for Specific Purposes courses. Subsequently, the thesis discusses with a description of English for Academic Purposes and its evaluation, further, suggests possible activities that can be used in the teaching of such language. The last chapter deals with the analysis of two textbooks that are used for teaching technical English at Universities.

KEYWORDS

teaching of technical English, teaching English at universities, teaching approaches, activities for teaching technical English, textbooks for teaching of technical English

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(podpis autora)

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GLOSSARY

EAP – English for Academic Purposes

EBP – English for Business Purposes

EGP – English for General Purposes

EOP – English for Occupational Purposes

ESA – Is an abbreviation for Engage – Study – Activate.

ESP – English for Specific Purposes

NNSE – Non – Native Speakers of English

NSE – Native Speakers

PPP – Is an abbreviation for Presentation, Practice, and Production.

INTRODUCTION

The reason why the author chose a topic dealing with the teaching of technical English at universities is that the author has been partly interested in the issues that such teaching raises, partly as he has been a student of many technical subjects that were taught in English and partly as a result of the author's potential interest in teaching English. As technical English became more and more needed in technical professions, the English for Specific Purposes delivered the goods and tore apart from English for General Purposes. The goal of this thesis is to familiarize the general audience with the problems of teaching English to future engineers and professionals in different fields who possess knowledge of technical English language.

In the first chapter, the general approach to English language teaching is explained. The chapter provides information about the approaches and their historical roots. Moreover, the chapter describes teaching methods of courses that teach general English. The description of the approaches to the teaching of general English is important in further understanding of teaching technical English. All of the described approaches and methods in the first chapter are usable, to some extent, even in the teaching of technical English.

In the following chapter, the historical development of English for Specific Purposes (ESP) is traced, which consequently led to the creation of English for Academic Purposes. Further, the chapter takes a close look at areas in which the ESP is used. Then the ESP course design is examined and explained. This exact part explains how the courses of technical English subjects are designed, what materials are used, how to analyse the needs of the student's and teacher's role in such courses.

The third chapter is devoted to teaching technical English at universities. The importance of academic writing was mentioned and its need for teaching technical English at universities. Further, the possible use of video, journal articles, and presentations in technical English classes was examined. Followed by a brief explanation of some of the possible activities usable in such courses.

The following chapter is concerned with the analysis of the textbooks that are used

in ESP courses. The general description of the textbooks is provided. Followed by the comparison of the textbooks and exercises.

1 GENERAL APPROACHES TO TEACHING ENGLISH LANGUAGE

As this work aims to describe aspects involved in teaching the technical English at universities, it is the general approach to the teaching of the English language that has to be examined. The general approaches consequently influenced every other approach which evolved from them. Thus, it is of the highest importance to mention the roots that stand behind them. Firstly, the approaches to the teaching are analysed, followed by the answers to the questions “Why?” and “How?” to teach English.

1.1 Approaches to the teaching of English

The general approach to the teaching of English may be used for purposes of teaching technical English at universities. Thus, the chosen methods were selected according to relevance and ability to be used further in the thesis. Those which were picked are described in chronological order, starting with traditional methods and moving towards more recent approaches.

1.1.1 Audio-lingual method

Audio-lingual methods are also known as “Army Method” as a result of that after the outbreak of the World War 2, the army soldiers decided to be proficient in the languages of their enemies. Thus, creating space for a new approach to the learning of languages. This method is based on linguistic theory and behavioural psychology. Richards & Rodgers (2001).

This method provides a familiar environment where students obtain a chance to

produce phrases orally and correctly. The principle of the audio-lingual method is that the student repeats phrases after the teacher. It involves stimulating the students to respond to the teacher. This method highly controls the way in which the language is presented, only one point of language is studied and worked on. Grammar is not the main part of the courses and progress is made only through repetition. In a typical lesson, a teacher shows pictures, either of people, objects, etc., which is followed by the teacher describing the picture. The students are then invited to repeat after the teacher. Such exercises are known as drills and are used to encourage the student to respond automatically without thinking about what they are saying Pollard (2008).

1.1.2 Communicative approach

The Communicative approach was developed to oppose the Audio-lingual method. The mentioned approach focuses on the development of the communication abilities of learners in real-life situations. It is focused on meaning rather than accuracy Richards & Rodgers (2001).

The concept of the approach lies in the theory that children acquire language rules by the use of language rather than by studying the grammar. Thus, for the teacher, it is necessary to create situations where students have a genuine need to say something, just as children do Pollard (2008).

1.1.3 PPP

PPP is an abbreviation for Presentation, Practice, and Production. The idea behind the presentation lies in the teacher presenting a language point in a similar way as it is done in the audio-lingual approach. The practice refers to the students using the target language through drills, controlled written or speaking activities, and repetition. The production involves independent work of students, who use their own sentences in the targeted language Pollard (2008).

The PPP carries in its nature some disadvantages. The main issue with its nature is that it is not possible to say if the students learned anything during the lesson because they might give the impression that they are comfortable with the new language point as they are producing it during the class. A few lessons later students might not be able to produce the language correctly or even will not produce it at all Frost (2004).

1.1.4 Task-based approach

The Task-based lesson consists of the teacher who sets a task that involves the use of language either not yet studied or the language studied previously that the teacher wishes to revise. The language point chosen can be an activity from a coursebook or an activity from supplementary sources. The teacher then sets up the task and pays the attention to the students as they proceed through the task while observing it is crucial that the teachers note down errors done by the students. After the completion of the given task, the teacher analyses the errors, presents them to the students and depending on how well or how badly students performed, decides whether to revise the whole language point or whether to practice it briefly Pollard (2008).

1.1.5 ESA

ESA is an abbreviation for Engage – Study – Activate. Engage as the name suggests means that the student is engaged or involved in the lesson either through the personal story told by the teacher or the picture that awakens student's interest. The idea behind this is that if the students are involved or engaged by such incentives, they become more open to the learning process. The study part is focused on a language point. Said language points can be grammar, vocabulary, or pronunciation. The activate part consists of a teacher trying to set up a realistic context that simulates real-life interactions while incorporating activities that force students to use any language they know, and that they

are not just focused on one structure Pollard (2008).

1.2 Teaching speaking

1.2.1 Why to teach speaking

There are three reasons to teach speaking. Firstly, it is a rehearsal. Students have a chance to go through role-play conversation that allows them to “get the feel” of how communicating in the foreign language feels like. Secondly, the student instantly obtains feedback from either the teacher or their partner. Thirdly, speaking activities can provide enormous confidence and satisfaction. Thus, providing motivation to both the students and the teacher. If all the students participate fully in the properly given activity by the teacher, who can provide sympathetic and useful feedback, the students will obtain tremendous satisfaction from such an activity Harmer (2000).

1.2.2 How to teach speaking

Such activities should be done through group work. Firstly, it is time-saving for the lesson. Secondly, it gives a chance to every learner to talk, also lowers the inhibitions of the learners who are unwilling to speak in front of the full class. The used level of the language is lower than that used in intensive language-learning activities in the same class. The used language should be easily produced and recalled by the participants so that they are able to speak fluently with the minimum hesitation Ur (1997).

1.3 Teaching listening

1.3.1 Why to teach listening

One of the main reasons for exposing students to spoken texts from different speakers is that they can learn to understand people from different parts of the world. The importance of this skill is even higher in technical English because the technical texts or technical discussions include many scholarly expressions. A combination of those expressions with different accents might cause trouble to the learners that did not hear any other accent than one of their teachers.

Harmer (2000:97) suggests that:

“Despite the desirability of exposing students to many varieties of English, however, common sense is called for. The number of different varieties (and the degree to which they are different from the one students are learning) will be a matter for the teacher to judge, based on the student’s level, where the classes are taking place, etc. But even if they only hear occasional (and very mild) varieties of English which are different from the teacher’s, it will give them a better idea of the world language which English has become.”

1.3.2 How to teach listening

Using the computer with different records is a better option as a result of that the listening only to the teacher will not provide such advantages. Quality of the played record either from a computer or from cd player is crucial for the teaching of listening. Further, students have to be prepared for the start of the listening and they have to know what they are going to do in the given task. Thus, it is essential for the teacher to listen through the tape, so that the teacher can judge whether the students will be able to cope with the given task Harmer (2000).

Students grow up with the technology, and it is a natural and integrated part of their lives. Thus, the use of technology in the classroom is a way to bring the outside world into the classroom, which will make listening more interesting for the students Dudeney & Hockly (2007).

1.4 Teaching reading

1.4.1 Why to teach reading

It is very important to expose students to English texts. The students will need such skills which are obtained from reading in their further studies, carrier or their everyday life. Further, any exposure to English is profitable for language students as some of the language learned from the texts, sticks in their minds as part of the process of the language acquisition especially if the reading text is interesting for the readers Harmer (2000).

1.4.2 How to teach reading

According to Ur (1997:141)

“It is generally preferable to begin reading only after the learners have some basic knowledge of the spoken language, so that reading becomes as quickly as possible a matter of recognizing rather than deciphering.”

It could be concluded that the students of technical courses, it would be preferable, to begin with rather straightforward texts that explain the technical terms such as the texts written in popular scientific style.

1.5 Teaching writing

1.5.1 Why to teach writing

There are various reasons why it is necessary to teach writing to students. Firstly, it is reinforcement. Some students acquire languages in a purely oral way, but most of the students benefit greatly from seeing the written text. Secondly, it is a learning style. Some students might be very quick at picking up the language just by looking and listening, but most of the students need a little longer to think things through Harmer (2000).

As students of technical courses, the students are going to be required to write theses, professional texts, conclude the laboratory exams, etc. Furthermore, the written discourse is the most important in further professional development. Whereas in spoken discourse, there can be found hundreds of accents and dialects, this is not the case of the written discourse. Thus, the knowledge of English writing is essential for better usage of a computer and through it conducting business, and communication with foreign customers and business partners.

1.5.2 How to teach writing

Although the students might place great emphasis on grammar, it should not be the most important part of language learning. There is a wide variety of writing tasks that might be assigned to the students. The writing skills and needs of writing should be considered in advance as some writing tasks could be too complicated for some students. Most of the students will need to write a business email in the years to come. For the business email writings, the students should be required to request information, reply to emails, and respond to the issues.

2 ENGLISH FOR SPECIFIC PURPOSES

In the previous chapter, the general approaches to the teaching of English were examined. The general approach had an immense impact on the ESP which evolved from it. Thus, the following chapter deals with the English for Specific Purposes and its approach to the teaching of English. Firstly, its historical development is traced, which consequently led to the creation of English for Academic Purposes. Further, the chapter takes a close look at areas in which the ESP is used. Then the ESP course design is examined and explained. This exact part explains how the courses of technical English subjects are designed, what materials are used, and how to analyse the needs of the student's and teacher's role in such courses.

2.1 Origins of English for Specific Purposes

There are three reasons common to the emergence of all English for Specific Purposes (ESP): the demands of a brave new world, a revolution in linguistics and focus on the learner Hutchinson & Waters (1987).

Hutchinson and Waters (1987) cover two key factors that breathed life into ESP. Firstly, the end of the Second World War brought with an age of enormous expansion in scientific, technical, and economic activity on an international scale. For various reasons, mainly, as a result of the economic power of the United States of America, the role of an international language fell upon English. Secondly, the oil crisis that happened in 1973 resulted in flooding the oil-rich countries by western power, money, and knowledge. The language of said knowledge was English. The general effect was that there was pressure on the language teaching professions to deliver the required goods.

2.2 Introduction of ESP

English for Specific Purposes (ESP) is an approach to language teaching that aims at present and future academic or professional needs of students. Thus, it focuses on the language skills, discourse, and genres required to address these needs and supports the students in meeting their academic or professional requirements Kirkgoz & Dikilitaş (2017).

ESP courses cannot be fixed in advance. Such courses need to be prepared in response to the specific needs of the students. The taught texts are likely to differ widely in various ESP courses even when the development of the same skill is being targeted Viana (2018).

2.3 Areas in ESP

The specific purposes in ESP are in general divided into either professional or academic needs, as was mentioned before. To the professional part, it is often referred as English for Occupational Purposes (EOP). EOP is applied in fields such as English for call centre operators, English for bank tellers, English for servers. Whereas the academic needs are being referred to as English for Academic Purposes (EAP), EAP is used in the area of pre- and in-sessional English language support offered at universities where English is the language of instruction Viana (2018).

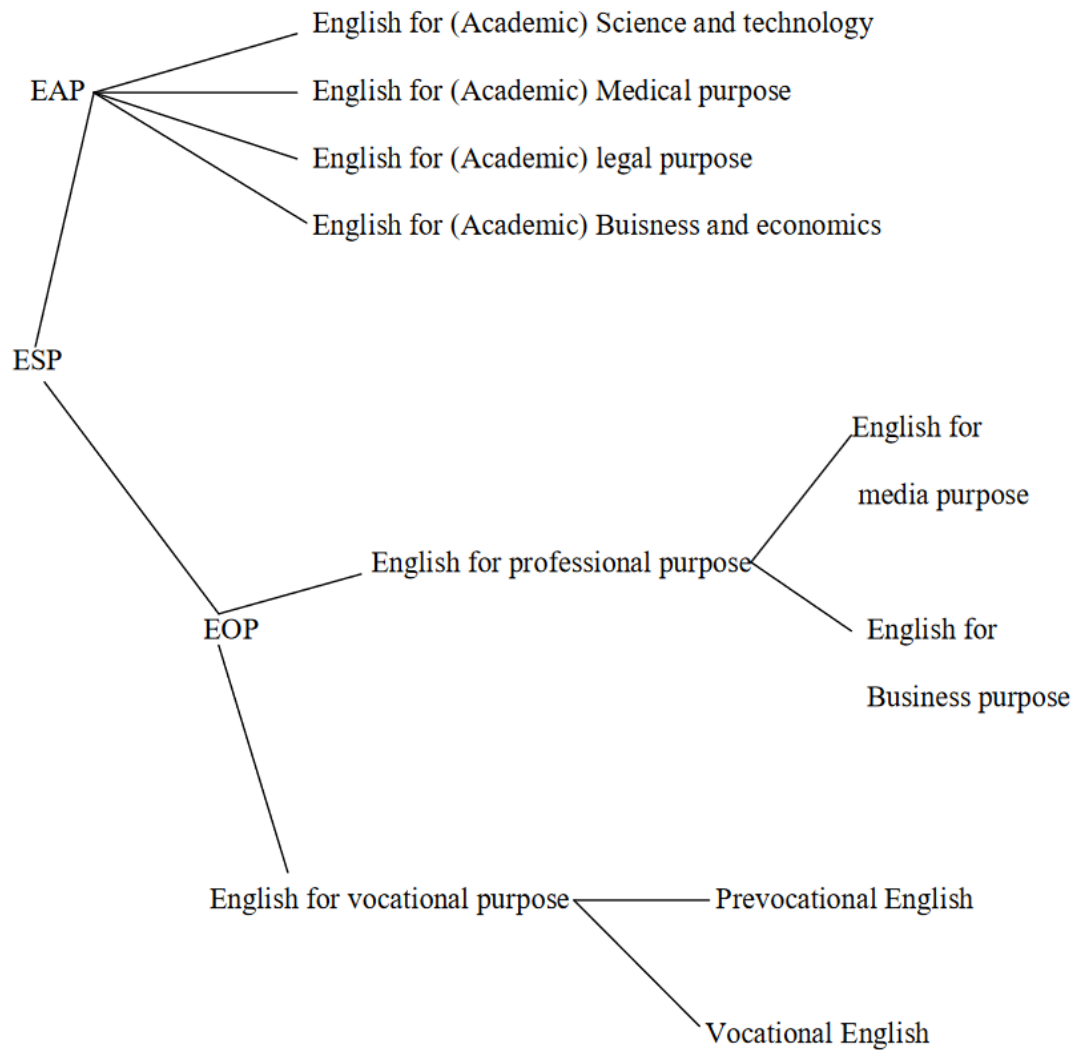


Figure 1.1 ESP classification by profession area. Dudley-Evans and St John (1998, p.6)

Dudley & St John (1998) distinguish between studying the language and discourse of science and technology for academic purposes (see fig. 1.1), which is designed for engineering students and studying for occupational (professional) purposes for practicing engineers. In the same way, a language course may be designed for architecture, medical, and other technical students for some purpose: for academic or for professional or for both.

Finally, Dudley-Evans and St John (1998) criticize the use of tree diagram since it fails to capture the essential overlap between EAP or English for Business Purposes (EBP) and English for General Purposes. Thus, the academics suggest that an additional perspective can be gained through the presentation of the whole of English language

teaching on a continuum that runs from clearly definable General English courses through very specific ESP courses (see fig. 1.2).

| <u>Position 1</u> | <u>Position 2</u> | <u>Position 3</u> | <u>Position 4</u> | <u>Position 5</u> |
|---------------------------|---|--|--|---|
| English for Beginners. | Intermediate to Advanced English general purpose (EGP) course with a focus on particular skills. | English general academic purpose (GAP) English general business purpose (EGAP) courses based on common –core language and skills not related to specific disciplines or professions | Course for broad disciplinary or professional areas, for example, report writing for scientists and Engineers, medical English, legal English negotiation/meeting skills for business people. | 1. An 'academics 'support' course related to a particular academic course 2. One-to-one work with business people |

Figure 1.2 Continuum of English Language Teaching Course Types. Dudley-Evans and St John (1998, p.9)

Further, Dudley-Evans and St John (1998) highlight that the use of continuum also makes a distinction between the nature of more specific ESP work. At position 4 (see fig. 1.2) the work is very specific in terms of the skills taught, but the groups are not homogenous. Thus, a teaching material designed for homogenous groups needs to be acceptable and understandable to all of the mentioned branches. Nonetheless, in position 5 (see fig. 1.2) the course becomes more specific. The course can be built to meet the specific needs of the target situation and the individuals concerned. Further, the course can make extensive use of authentic material in their subject area. The dominant characteristics of such courses are that the teaching is flexible and tailored to individual or group needs as they arise.

2.4 Course design

Course design is the process by which the data gathered from learning needs are interpreted in order to assemble an integrated series of teaching-learning experiences. Aim of such a course is to lead the learners to a piece of particular knowledge. Practically said this involves the use of theoretical and empirical information available to produce a syllabus, in order to adapt or write materials according to the syllabus and to form evaluation procedures by which progress towards the specified goals will be measured Hutchinson & Waters (1987).

2.4.1 Questions to be asked

According to Hutchinson and Waters (1987), designing a course of ESP is fundamentally a matter of asking questions in order to provide a reasonable basis for the subsequent processes of syllabus design, materials writing, classroom teaching, and evaluation. It is essential to ask: Why does the student need to learn? Who is going to be involved in the process? Where is the learning to take place? When is the learning to take place? What does the student need to learn? These questions have to be answered when designing the ESP course (see fig 1.3).

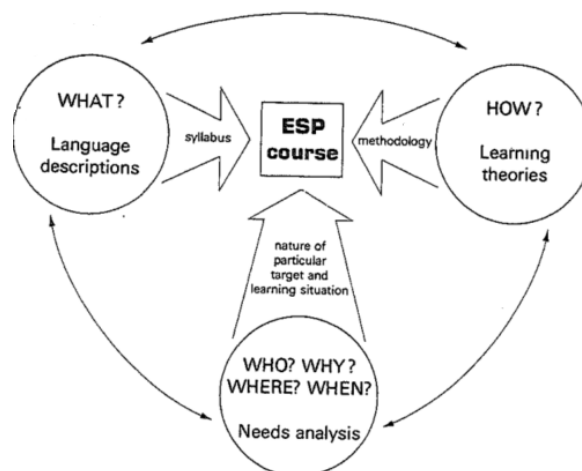


Figure 1.3 Factors affecting ESP course design. (Hutchinson & Waters, 1987, p.22).

2.4.2 Needs analysis

ESP courses are commonly set up to teach the language and communication skills that specific groups or the language learners need or will need to function effectively in their disciplines of the study, the professions, or the workplaces. Therefore, ESP focuses on teaching specific language and communication skills. The course designs generally include a stage in which the course developers identify what specific language and skills the group of language learners will need. The identification of language and skills is used in determining and refining the content for the ESP course. This process is termed “needs analysis” Basturkmen (2010).

The needs analysis process involves the identification of tasks, activities, and skills students will be using English for. Identification of what the learners do and do not know and can or cannot do according to the demands of the situation. Identification of learner factors: motivation, the way the learners learn, and their perception of their needs. Identification of factors of the course environment in which it will run and consideration of what possibly the ESP course and the teacher are able to offer. Needs analysis also serves for purpose of evaluating ongoing ESP courses. The teachers working on ESP courses often find that their understanding of the learners’ needs develop as they progress through the course and that they use this developing understanding to modify the course Basturkmen (2010).

2.4.3 Teacher’s and Student’s Roles in ESP

Although the ESP teachers may possess some knowledge of fields in which their students work or study, these teachers are not obliged to be knowledgeable in all of these fields. For example, a degree in electrical engineering or medicine is not required of the teachers in ESP courses for electrical engineers or doctors. In ESP, the roles are different for the teachers and the students although complementary. The teachers are specialists in language education and also possess pedagogical skills. On the other hand, the students have some knowledge in their professional field and usually possess a motivation to learn

the language, typically to be able to communicate with clients, read a manual, or to be promoted. Thus, creating somewhat of a symbiotic relationship between the teacher and the student. Teachers can learn with their students about their professions and professional practice, while students can learn how to use English successfully at their workplaces Viana (2018).

Further, the teacher might have a problem coping with the fear of the subject. It is for a fact that the majority of ESP teachers acquire their degree at universities, where they could not have encountered the area of engineering, IT, medicine, business, or other specific fields of study. Such a situation might lead to the disaffection of the teacher and thus, resulting in the course being boring, not drawing student's interest and motivation, hence the deterioration of a learning process.

Hutchinson and Waters (1987:162) offer several causes why ESP teachers find it difficult to comprehend ESP subject matter:

- “1) There is a tradition in education of separating the Humanities and the Sciences*
- 2) Many ESP teachers are reluctant settlers in new territory.*
- 3) Considering the scale of the ESP revolution it must be admitted that little effort has been made to retrain teachers or to at least allay their fears.*
- 4) The general attitude in ESP seems to be to expect teachers to conform to the requirements of the target situation.”*

There has certainly been always a gap between Human studies and Science, instead of cooperating, they have developed separately, apart from a few exceptions. There was no significant change present which is the reason for some ESP teachers being uncomfortable teaching such subjects. Furthermore, it is not a necessity for the ESP teachers to possess the same knowledge of the field of study as their students, as it was discussed above, however, some of the teachers do not realize that.

2.4.4 Materials in ESP Courses

The key difference between the materials for the English for General Purposes (EGP) and the English for Specific Purposes is that the materials for EGP probably would be part of a textbook series while the materials for the ESP would generally be gathered in a single textbook. This also relates to the typical length of the courses. The ESP courses are much shorter than the EGP courses. The brief duration of the courses is produced by the pressure from the field where the students work. For example, they have to learn English as soon as possible to be able to get their jobs, perform in their jobs or the course might be funded by the employer Viana (2018).

It might seem that it is more accessible for the learner of the English language to acquire certain lexical level, grammatical structures or catch correct pronunciation since the learner is exposed to the English language every day, even unintentionally, through the modern inventions such as internet, media, games, mobile phone applications, etc. The mentioned and unmentioned elements play a substitutional role for the teacher in learning. Such immense exposure to the English language might evocate a feeling in students that they already know the language, thus, they are not being rewarded in paying attention in the classes. To most, that might seem like a problem. But a teacher can benefit from that likewise. The teacher should try to keep with the trends, bring the language closer to the student's interest or needs and work with what the students already know from the media and internet, which makes the preparation for the teacher easier and the classes more entertaining for the student.

2.4.5 Motivation

Motivation is to some extent internal drive that encourages somebody to pursue a course of action Harmer (1991).

Creating a positive learning atmosphere in the classroom is a primary step for achieving set objectives and goals. The students are supported in their work, learning and teaching are more pleasant and enjoyable for both sides of the learning process. Creating

a positive learning atmosphere is firmly connected with inspiration and motivation that is a fundamental piece of student's work that influences their future achievement or disappointment.

3 TEACHING TECHNICAL ENGLISH AT UNIVERSITIES

3.1 English for Academic Purposes

The English for Academic Purposes (EAP) deals with researching and teaching the English language needed by users of the language who perform academic tasks. The field originally emerged out of the wider area of the ESP and over the last two decades has increased enormously in importance, as a consequence of the global growth in the use of English for employment, as well as academic research. Although the EAP is most often applied to university level and non – native speakers of English (NNSE), the term is very extensive, thus, the EAP is also taught to the native speakers (NSE) secondary school students who have to read textbooks and write essays and also to academics who need to give conference presentations and write research articles. All of the stated facts mean that EAP has become a major research field in its own right, responding to the demands of users by providing increasingly sophisticated accounts of academic discourse and translating these insights into pedagogically valid methods and materials. EAP can be examined from three points of view, each based on a different approach: corpus-based work, genre analysis, and investigation of the social context Paltridge & Starfield (2013).

3.1.1 The assessment and feedback

At the start of the course, the students should get familiar with the assessment criteria in the way that they can understand. These are then used to support students and become target outcomes for the course. Further, the learners should be aware of the conditions, under which they will be assessed. The appraisal should employ criteria–referenced scales

that describe competencies, so the focus is on learning outcomes, what students can do, rather than ways of teaching. Students should receive feedback on all assessment tasks in order to point out their strengths, their progress, and what they need to do to improve further Hyland (2006).

3.2 Teaching technical English at universities

It is rather difficult to state what the students of electrical engineering or informatics will have to be taught since most of them are still in full – time education. Thus, no one knows what kind of job those students might end up in. It is important to teach the students basics of vocabulary, a grammar which they will use through their technical studies, jargon, and other skills even though at the end of their studies and application to work they might find some of the learned skills meaningless. Students of such subjects tend to be interested in technical topics even if they have little relation to their own specialisation Case (2012).

There will be minor differences between the English language course for the students of electrical engineering and the course for the students of informatics. For example, professional jargon and grammar syllabus. Yet, most of those courses will probably be the same since those two subjects are very close to each other Case (2012).

3.3 Activities used in the teaching of technical English

3.3.1 Dialogue

Through dialogue, it is possible to isolate a structure or concept and to reinforce the terminology and known structures that are likely used in association with the new

materials presented. A carefully constructed dialogue will not present anything new except for the material which is to be studied. Dialogue is useful in the sense that all language skills are activated. It should be helpful in making use of oral skills and the student gaining confidence in speaking. Furthermore, the students should be required to make conclusions from the dialogue, which is an important skill for the students of technical English. There are several approaches to how to proceed with such a dialogue, which are not entirely unique to technical English. The dialogue should be rather short and address the topic that is in question. The meaning of what concept or linguistic feature is being dealt with must be clear and explicit. The teacher can incorporate a new vocabulary, which should be decipherable in the context, therefore the definitions of the vocabulary should not be necessary.

3.3.2 A video

A video or a film has become such a part of everyday life that one would expect that it became a part of everyday teaching likewise. Although some courses managed to successfully incorporate the video into the lessons some did not. Well-chosen videos can be refreshing from more traditional classroom activities for the student. Furthermore, among other advantages, they can be educational, fun, and motivating. The videos immediately engage the students, stimulating all the aspects of language usage. Whether the videos are authentic or made specifically for the students of the course, it has been designed to draw the student's attention which is an important part of successful teaching. Such videos provide strong visual cues that help to understand the topic and the language even when it is hard to follow. Moreover, the video is able to expose the students to a different points of view, cultures, accents, and dialects of English. A video about an experiment and its conclusive results lends itself to explicating a theory. The video of this sort can be discussed in terms of what was done, why, and how it was done, therefore constantly improving vocabulary and emphasizing oral skills.

The students could be required to write a brief essay contrasting the benefits of technology and traditional methods of investigation using specific structures and terminology. There is a possibility for the assignment that requires students to draw a

diagram of specific apparatus used in the video, or process of itself as the video i.e. camera angle, video processing, lightning, and projection. Once these were done, the students could compare their observations and findings, discussing their own feelings about what they saw.

Although these are exercises in which the teacher could participate as a learner, there are other exercises that the teacher could design from the video experience. A word study guide could be made up of homework assignments. The students could look-up the definition of the words, use them in sentences, and finally, fill in the blanks in an exercise. The purposes of the video could be to practice notetaking as it is needed in a lecture situation, learning to tune in to key phrases and understand cause and effect relationships. As a follow-up exercise, students could be expected to make an outline from their notes and thus could check their comprehension through the class's discussion.

While planning to use the video focused on specific topics in the classroom, it is essential for the teacher to view the video ahead and develop some exercises in areas of vocabulary or technical concepts that will prepare the students for the video. Depending on the comprehension level of the class, the video should be played at least twice. Allowing the students to have questions after the first showing is essential, as they might need to clarify concepts, vocabulary, and difficult structures. As the questions are answered and the video will not result in a frustrating exercise, the video should be played again.

For the purpose of using the video in the course, there are various sources that could be used. Among the most known it would be a site located on a world wide web called YouTube. YouTube's content is entirely developed by its users allowing it to be for free and the site offers videos of anything. Thus, it is rather on the teacher's imagination what should the video be about. The disadvantage of YouTube is that not every video has subtitles and finding a well-prepared video for use in the classroom is rather difficult. Another internet source is FluentU. FluentU offers videos prepared for the English language courses of considerable variety, music clips, movie trailers, news, talks, etc. Every video possesses English subtitles and it is possible to immediately check the definition of every word in the subtitles. Although this is a considerable advantage compared to YouTube, the FluentU is a paid source of videos, which might be a problem.

Furthermore, FluentU's content is limited, therefore it is not easy to find the video that would fit the classroom.

3.3.3 Journals and newspaper

Journal and newspaper articles can provide a rich source of material that is more controllable than the use of the video. By selecting an article from a journal or newspaper, the teacher has more control over the sentence construction, vocabulary and technical concepts to be worked with. These articles are a rich source of material to create exercises for, going from the explicit to the implicit. As with videos and dialogues, vocabulary definitions in context are reinforced.

Finding magazine articles for the students of technical disciplines is rather uncomplicated. It is important, however, that the article should be comprehensive in content, particularly in supplying sufficient background information to make it understandable to all of the students. By presenting an article of this sort, the student of the particular field should give a view of where this information fits into the overall picture of his discipline and to supply definitions of any science-specific vocabulary if he is able to. This reinforces the feeling of symbiosis between the teacher and student, in the sense that the teacher teaches English and the student teaches him the science, as well as supporting the student to express himself communicatively in an area which has not been covered in the English class.

An article can cover a spectrum of exercises. An analysis of the text can be the basis for the class discussion, which might include vocabulary definition, examining grammatical structures, and different types of paragraphs that occur frequently in technical English. Word study exercises such as matching synonyms and building word families. Sentence combining, summarizing, and outlining, are all valid methods of examining and analysing a text.

3.3.4 Presentations and lectures

Presentations and lectures are a great tool in preparing the students for the future responsible positions as technologists or engineers. In many fields, it is important that the students become comfortable with standing up and giving a monologue in front of the group. The preparation for such activity should be done gradually as the shyer students need to gain confidence. By giving a model short presentation or a lecture, the shyer students will have a format to follow with confidence, on the other hand, it allows the more secure or experienced students to be as creative as their linguistic and technological knowledge will allow. The monologues should be rather shorter than longer.

Following the teacher's several model short lectures, the use of magazine articles is an uncomplicated approach to break students into public speaking. By assigning an article as homework and giving one student the job of summarizing the article for the class. As most articles are reasonably short, this type of lecture should not take more than several minutes. As all of the students will have read the article, there should not be many questions regarding the lecture. However, as the teacher models presentations, the student should be encouraged to ask for clarification of difficult concepts which they do not comprehend.

Forerunners of these presentations could take the form of exercises in which one student is an important person or an ambassador from another country and is being interviewed by others in the class. Students would be expected to ask appropriate questions and to write up a group report which could be then analysed in a follow-up exercise. As students build confidence in speaking in front of the class, they should start on the preparation of their lectures. This begins with selecting a topic, learning how to limit its scope, how to research the necessary information, outlining, and making notes.

Once the presentation has been prepared, the student has to deliver it. At this point, the “lecturer” himself is responsible for being understood, clarifying vocabulary and technical concepts, and presenting the information in a logical progression. The audience should take notes and ask a relevant questions. A follow-up exercise to this is having the listeners write up a short essay on what they heard and understood. In this way, the teacher and the “lecturer” can check comprehension and make observations on the effectiveness

of the speaker's communicative ability.

3.3.5 Quick activities

Further, the brief explanation of some usable activities that are mostly focused on reinforcing the students' vocabulary can be found.

Definitions game is one of the most typical vocabulary games. The student is asked to describe the thing they are thinking of without mentioning any part of its name until their partner guesses what it is. This activity can be improved by adding practice with suggested language to describe things with, e.g. dimensions, materials, adjectives, actions that those things do, and actions that are done to those things Case (2012).

List Dictation is an activity that combines more categories of vocabulary. A list of words is given out by the teacher, then the students guess the category which covers the words. The categories can range from materials to shapes to any other part of the vocabulary Case (2012).

Troubleshooting conversations are conversations where one student is given a card with an interesting reason for problems such as "You are very short-sighted but will not wear glasses". The student's partner then should proceed to ask questions and suggesting things until they find out the reason for the problem Case (2012).

There are many activities for students of technical English, it basically depends on the teacher and his creativity. Any activity where students are forced to work independently with the vocabulary of their academic attraction, might help them in progress through their technical English courses or further in their professional life.

4 COMPARISON OF THE TEXTBOOKS

An increase in population and the overall educational level of population means that the demand for a specified communicative approach has increased significantly. The ESP courses are attended not only by young students, but an older generation present in such courses is not uncommon. The ESP courses at Universities are common to last from forty to sixty hours.

The ESP courses are so diverse that, when the materials and resources are considered, identification of the ideal coursebook for every teaching-learning situation is unimaginable. Still, the textbooks are perhaps the finest option among various sources of materials. Such an approach is perhaps the most obvious and effortless in completing the course for the teachers and learners. The judgement, which and why the materials should be used, should be made with great consideration of the aims of the study course, methodology, and the learners' needs Cunningsworth (1995). Contrary, every teaching-learning situation in ESP courses has its own specific requirements as far as the materials, methodology, and procedures are considered. Dudley-Evans and St. John (1998) oppose that and suggest that the selected materials in such courses should be adjusted and enhanced to include the necessities of the students. When deciding the choice of the textbook, the usefulness of it for most of the students should be considered, given that it is enhanced by different materials.

Thus, the suitably selected textbook, used alongside the carefully selected materials, could be a valuable tool in the teaching while not being the dominant aspect of the course. Esteban (2002) emphasizes the fact that such materials ought to satisfy the nonimmediate and immediate objectives of the students which involve associating the course materials to the student's area of professional interest and their needs.

The ESP textbooks assume a pivotal role in the teaching of technical English it should be only essential that more studies should efficiently assess the ESP textbooks and their highlights, as it is only essential to reconsider and modernize the present textbooks. Such evaluation should be done with correspondence to a specific model, which would suit the wide variety of the textbooks intended for the students of ESP courses. Nunan

(1991) confirms that for the teachers, it would be considerably helpful to have methodically evaluated materials, which would help them to determine whether the textbooks match the students' needs.

Therefore, the aim of this chapter is to compare the two textbooks that are used in the world for teaching technical English. These two textbooks were chosen on the fact that they are published by Oxford University Press and Cambridge University Press. The fact that these two publishers, publish the textbooks that are the most popular textbooks used in teaching general English at high schools means that the students should be already familiar with patterns and exercises used in the ESP textbooks at universities. Due to their previous experience, the teachers will probably be already used to teach with such a textbook. This might be a result of their previous experience in teaching English for general purposes where the textbook is a basic tool and plays a crucial role in the classes.

4.1 The textbooks

4.1.1 Cambridge English for Engineering

Cambridge English for Engineering is part of the *Cambridge English for* series, which is developed specifically for the ESP courses such as engineering, nursing, the media, and science. The author of the book is Mark Ibbotson, who has tailored the textbook for self-study or the courses that last forty to sixty hours. The level of the textbook corresponds to the Common European Framework and it is intended for the students with language skills at the level of B1 intermediate to B2 upper intermediate.

The analysed textbook covers the common topics in all branches of engineering from civil to electrical engineering in ten standalone units. Each unit's content is described on the introductory double page. There can be found ten units and each unit is divided according to three different aspects. Firstly, it is skills. Under the skills tab, it is possible to find the units divided according to the skills the students will learn in each unit. The

topics of the units are coherently connected in the logical order for example: *Describing technical functions and applications* precedes the unit that teaches students the *Describing specific materials*. Secondly, it is divided according to language that the students acquire in a particular unit, such as *Phrases related to scale, Shapes, and 3D features*. Thirdly it is divided according to the texts that can be found in each unit. These texts are further divided by the forms of the text, it is either reading or listening.

At the end of the book, there can be found three separate chapters, that are mentioned on the bottom of the second introductory page and can be easily overlooked. These mentioned units are *Audioscript*, *Answer key*, and *Glossary*.

The first chapter, *Audioscript*, as the name suggests, is the list of listening exercises rewritten into the book. The rewritten audio scripts in the book are long paragraphs that do not show any kind of an effort to help the student to find the information, which he is missing in the text. Thus, the student might be forced to use the second chapter at the end of the book which is the *Answer key*. Whereas making the crucial information in the text bold would be very helpful for the student and allow him to complete the task on his own without the use of the answer key. The second chapter is the *Answer key*. The answer key is the overview of the correct answers to the exercises. It is easy to navigate in and does not introduce any new rules different from the textbooks intended for general English learning. Hence, the students who are used to the use of English textbooks in the classroom will be able to use the answer key without any kind of support or introduction. As for the third chapter, the *Glossary* is separated into three columns by *Words*, *Definition*, and *Translation*. Furthermore, in the glossary, there can only be found the professional terms with its definitions. For the purpose of learning the technical terms, it is very well designed, and it leaves the space for the student to write the translation. Unfortunately, there are only the professional terms, there is a lack of vocabulary considering the general English, in which the student might lack the necessary knowledge of and the pronunciation of the words is also absent.

Cambridge English for Engineering has a theme-based organization in which there are various parts of engineering covered. The topics covered are all relevant to the topic of engineering. The book exploits situational syllabus and does not reflect any culture-specific situations. In the case of content, its focus is on the grammatical patterns that

might cause difficulty to the students rather than on the vocabulary. Regarding the vocabulary, it cannot be expected to learn specialized content, but the language is relevant to the area of engineering. The book includes exercises such as reading, listening, vocabulary in context, dictionary work, sentence formation, and work in pairs and groups.

The language used in the book does seem authentic. The reading passages might be real-like performances naturally occurring in a normal setting. The resemblance to the target-like language samples is noticeable. The textbook does not contain any exercise that is devoted to writing in the scientific style which, considering the academic vocabulary, is considerably important for the students of ESP courses. The vocabulary should be incorporated in the textbooks used for example by the students of electrical engineering, yet the author does not pay any attention to the vocabulary, structure, or grammar used in EAP. The vocabulary included in the book is of professional jargon, but it is not intended for the specific branches of engineers as the topics covered are more general.

4.1.2 Oxford English for Careers: Technology 1

Oxford English for Careers: Technology 1 published by *Oxford University Press* is a part of the *Oxford English for Careers*: series, which is developed explicitly for the ESP courses such as technology, nursing, oil, and gas. Author of the book is Eric H. Glendinning whose work resulted in the textbook that corresponds to the Common European Framework and it is intended for the students with language skills at the level of B1 intermediate to B2 upper intermediate.

The examined textbook covers the wide range of the regular topics in the field of technology, from the categorizing place of technology in everyday lives and what are the inconveniences while studying the technology up to the crime-fighting technology and its future. The book contains fifteen units, each divided similarly to the previously analysed textbook, according to career skills and knowledge, language skills and language knowledge acquired. On contrary, each of these, is further divided, providing the student with precise comprehension of what and where can be exactly found. Throughout the

book, in each unit, there can be found a variety of bonus texts with interesting facts, assessing the progress in a unit, keywords, and repeating what language skills and knowledge will be discussed. The bonus texts with facts are refreshing addition which emphasizes the student's vocabulary and providing them with interesting facts.

Moreover, the textbook contains a chapter called *Writing bank* that can be found in the middle of the book. The writing bank provides the students with a wide range of reading exercises, in which the book surpasses the *Cambridge English for Engineering* that does not provide any further reading exercises. At the end of the writing bank, there can be found the *Reading bank key* which is the key for the reading exercises in the chapter. The placement of the writing bank in the middle of the book is rather inappropriate, as it is difficult to find the chapter and the placement does not correspond to the logical sequencing of the chapters. The writing banks readings are focused on the various topics from the entire book, rather than on the previous chapters. Therefore, it would be more suitable to position the chapter at the end of the book.

At the end of the book, there can be found four additional chapters. Firstly, it is *Pairwork activities*. The chapter's aim is to reinforce each of the students from the pair with information, each one possesses only half of the information therefore forcing them to ask questions in order to complete the information given. The chapter is rather complicated to navigate in, in this case, it is understandable as the author had to separate the exercises in half although adjust them on four pages. Secondly, the book provides the student with a table of symbols and characters. Each symbol used in the books is described, by the use of example and meaning. Thirdly, the *Grammar reference* chapter, where the explanation for the grammar can be found. The grammar used throughout the whole book is explained, which can be a rich source for the students and the teacher. The students, in case of a lack of knowledge of English, are able to learn the grammar without the need for the teacher's attention. Furthermore, it can be used by the teacher to explain the grammar, therefore the requirement for the teacher to possess' materials explaining the grammar taught in the textbook is redundant. The following chapter is *Listening scripts*, listening scripts are rewritten listening exercises into simple paragraphs followed by keys for the exercises. As the last chapter, there can be found a *Glossary*. In the glossary, the vocabulary of the book is explained with examples and the correct pronunciation is mentioned. The glossary includes the terms from the general English and

professional terms. However, the words are very tightly positioned, not leaving space for the possible translation.

Oxford English for Careers: Technology 1 has a theme-based organization that covers various topics of technology. The topics presented to the students are relevant and it seems that the book uses mostly authentic language. It cannot be expected that the student would be able to learn specialized professional vocabulary. The book includes exercises such as reading, listening, vocabulary in context, dictionary work, sentence formation, writings and work in pairs and groups.

It could be concluded that the overall structure of the textbook seems to use authentic language. There can be found exercises that prepare the students for the situations in the future such as *Writing CV*. Useful phrases to use in writing are mentioned in the book that could be included in academic writings. The vocabulary included in the book is of the more general technical English. Therefore, for tightly specialized courses, the vocabulary would not be sufficient.

4.2 Comparison of the textbooks

Even though they are published by different companies and the topic is different the two textbooks described are very similar. On contrary the *Oxford English for Careers: Technology 1* units are connected through the grammar, while the *Cambridge English for Engineering* units are more connected through the topics. The considerable difference lies in the authors and their approaches to the presupposed knowledge the students possess. The *Cambridge English for Engineering* does not provide the students with vocabulary or explanation of grammatical structures. The teachers and the students in case there is a lack of knowledge, will not be able to find it in the book and will have to use other sources. Whereas the *Oxford English for Careers: Technology 1* which included the comprehensive vocabulary and chapter devoted to the grammar, ease the teaching-learning process to both sides of it.

4.2.1 Work in pairs

As for the work in pairs exercises, the *Cambridge English for Engineering* puts the emphasis on creativity rather than on the accuracy. The book rarely provides the students with examples of how to proceed in the tasks, which results in that the students cannot end up using only the examples, therefore the fluency over accuracy approach is used. The variety of these activities is wider and more common, such exercises are found on most of the pages. On contrary, the *Oxford English for Careers: Technology 1* often provides the students with the exact layout and an example of how to proceed to gain the desired information. Therefore, the accuracy is aimed for, rather than fluency. Furthermore, such exercises are rare, and the variety is limited.

4.2.2 Audio scripts

Listening exercises in *Oxford English for Careers: Technology 1*, as it was already mentioned resemble the real situations. Most common are the listening exercises from the category of *It's my job* where real people talk about their jobs. The emphasis is put rather on listening as the students are not regularly required to speak about the topic. In *Cambridge English for Engineering* the listening activities connection with speaking activities is common. The textbook forces the students to immediately use the vocabulary found in the audio scripts by speaking which is commonly done through work in pairs activity. The audio scripts are rich in professional vocabulary in both textbooks, while the dialogues are common for both textbooks, the *Oxford's* audio scripts are more common to be interviews. Although the topics and form of the scripts are relevant to the topic of the unit, the following exercises relate to audio scripts by their form and they serve as the examples of how to proceed in the next exercises rather than how to proceed in real-life dialogues and as the source of vocabulary. Opposed by *Cambridge English for Engineering* where the topic of the dialogue in audio scripts is mostly communication at the workplace. The *Cambridge's* approach to the audio scripts and their topics is more suitable for the technical English courses as the students do not only learn how to ask and

answer the question but learn how to exemplify and argument in the conversations. Therefore, the book focus is on fluency and not accuracy as it is in the case of its counterpart.

4.2.3 Reading

Reading tasks topics are relevant and mostly authentic in both books. It is not uncommon to find attempts to personalise the topics to the reader. While the *Cambridge's* book consists of a variety of reading tasks. Most of the articles are about technology and its use, providing interesting facts, which keep the reader's attention. The tasks variety is wide and the distribution of skimming and scanning tasks is equal. The book provides pre-reading, during-reading, and after-reading tasks that are mostly connected with other functional language tasks. *Oxford's* textbooks reading tasks are relevant to the topics of the units. The book provides readers with interesting facts especially in the *writing bank* which is an additional chapter that consist of various articles and the tasks to them. The tasks connected with articles are mostly of the scanning type, the skimming tasks are rare and memorising tasks are commonly used, not developing the students reading skills.

The lack of readings from graphs and tables is noticeable in both books. Although these skills are crucial in the future life of a technologist or an engineer, they were not included in the books.

4.2.4 Writing

Although *Cambridge's* book did not include any writing tasks, *Oxford's* textbook included exactly four writing tasks, which, considering the fact that the fifteen units are on one hundred pages, is not many. The included writings are *Short report and linking words, Short sequence, Short description, and CV*. These tasks provide examples to the students according to which they should write the task. The tasks variety is sufficient as

none are the same. It should be pointed out that writing a CV, which is moreover the topic of general English is a useful skill for everyone. The lack of writing exercises in both books is improper as the students of technical English will need such skills in their further professional life.

4.2.5 Summary

It could be summarized up that both textbooks are viable for teaching technical English at universities. Both books have their disadvantages, thus, the use of teacher's materials will be inevitable.

The *Oxford English for Careers: Technology 1* will need teacher's help in the pair work activities, providing the students with vocabulary and reading materials from their specific field, and appealing to the student's fluency. Likewise, the students should be provided with vocabulary and the writing tasks from academic English. The textbook is suitable for the classes where the grammar and vocabulary concerning general English will have to be explained accompanying the teaching of the technical English.

The Cambridge English for Engineering is considerably a better alternative for the technical English courses at universities as the accuracy is not the aim of such courses. The textbook aims at the fluency of the students, providing them with a variety of work in pairs or group activities, where students must improvise. The book's lack of explanation of general vocabulary and grammatical structures, writing tasks, and vocabulary concerning the EAP will have to be compensated by the teacher.

5 CONCLUSION

The main problem of the teachers of technical subjects taught in the English language at universities is that neither the students neither the teachers know what students will be doing for work. Thus, even the most specific courses might not be useful to everyone as it is usually in focused ESP courses with already working students.

In the first chapter, the approaches to the teaching of General English were introduced. Further, approaches and their use were explained. Then, teaching methods of different skills of speaking, listening, writing, and reading were interpreted. Observations gathered from the teaching approach to the general approach to the teaching of the English language might be used by the teachers even in the ESP or EAP and other courses.

In the second chapter, the origins of ESP were put into the context and described briefly. There was a very important point made by mentioning that the ESP course cannot be fixed in advance and has to be prepared according to the student's needs. Then, it was approached to the areas in ESP and the course designs of ESP. Areas in ESP were divided into specific fields. By dividing the ESP into the specific fields, it was possible to approach the course design, the teacher's and the teacher's role in such courses, and used materials.

The third chapter put the ESP courses concerning the university level of English and informed the reader about different topics related to the subject. Further, the possible use of video, journal articles, and presentations in ESP classrooms was described. Further, brief examples were provided of what activities might be useful in teaching technical English at universities.

Finally, the textbooks were analysed according to their syllabus. The exercises and structure were examined. The advantages and disadvantages of the mentioned books were described, and the crucial point was made that even though the textbooks were designed for the technical English courses, they are not sufficient without external materials provided by the teacher.

Some issues raised in this thesis could be further researched in greater detail

considering the individual topics. The relation between the teacher and their understanding of the taught topic could be examined in-depth concerning the question: Who is a better teacher of technical English at universities? Should it be the English language teacher or the subject specialist teacher?

ABSTRAKT

Tato bakalářská práce se zabývá problematikou výuky anglického jazyka na vysokých školách. Cílem práce je popsání a porovnání různých přístupů k dané problematice. Tato práce se zaměřuje pouze na výuku technického anglického jazyka, který sebou nese nejen problematiku výuky anglického jazyka, ale i technických předmětů. Studium této problematiky je důležité zejména z důvodu toho, že na pracovníky v technických oborech jsou kladeny vyšší nároky na každodenní využití cizího jazyka.

Úvodní kapitola se zabývá popsáním různých přístupů k výuce obecného anglického jazyka. Práce zmiňuje důležitost těchto přístupů, které ovlivnily postupný vývoj výuky technického anglického jazyka. Dále navazuje otázkami *Proč?* a *Jak?*, které vysvětlují, proč je důležité studenty vyučovat schopnosti rozumět anglickému jazyku v psané a mluvené formě a jak je těmito schopnostem naučit. Mezi zmíněnými důvody můžeme nalézt názory akademiků, například Harmer (2000) zmiňuje důležitost výuky psaní v anglické jazyce, jelikož výuka pouze mluvené formy jazyka není komfortní a nejrychlejší metodou pro všechny studenty, avšak psaná forma poskytuje studentům dostatek času na promyšlení textu. Autor zde zmiňuje důležitost schopnosti psát v anglickém jazyce pro budoucí povolání studentů, kde psaná forma jazyka je upřednostněna při uzavírání obchodních dohod a při komunikaci se zahraničními klienty a partnery.

Navazující kapitola se zabývá rozбором angličtiny pro zvláštní účely. Hned úvodem kapitoly autor zmiňuje důležitost všeobecného přístupu výuky angličtiny pro toto odvětví. Kapitola zprvu zmiňuje historické události a jejich význam pro vznik tohoto přístupu k výuce angličtiny. Zejména je zde představen význam konce druhé světové války, který sebou přinesl věk technologického vývoje a také ekonomickou nadvládu Spojených států amerických. Jako druhou historickou událost, která přispěla ke vzniku tohoto oboru zmiňuje ropnou krizi v roce 1973. Následuje rozbor polí působnosti, kde je tento přístup používán. Autor zde zmiňuje význam pro téměř všechna profesní odvětví, kde je zapotřebí nejen ovládat obecnou angličtinu, ale i profesionální žargon. Dále kapitola

rozebírá skladbu kurzů anglického jazyka pro zvláštní účely a co všechno obsahuje příprava takových kurzů. V kapitole *Učitelova a Studentova role v angličtině pro zvláštní účely* je popsána vzájemná symbióza mezi učitelem a student, kde učitel nemusí mít vždy dokonalé technické znalosti oboru, a tak se také může od studentů naučit například technickým procesům.

Třetí kapitola pojednává o samotných možnostech výuky technické angličtiny na vysokých školách. Zprvu je představena angličtina pro akademické účely, která se postupně vyvinula z angličtiny pro zvláštní účely. Dále kapitola apeluje na informovanost žáků kurzů technické angličtiny, jejichž součástí jsou zpětná vazba a jasně dané podmínky pro splnění kurzu. Následně je rozebrána problematika složení vyučovaného materiálu, kde je těžké rozhodnout jaká slovíčka či gramatika musí umět vzhledem k jejich budoucímu povolání, které může, ale nemusí úzce souviset se zaměřením samotného studovaného oboru. Rozdíl mezi kurzy technické angličtiny pro studenty elektrického inženýrství a studenty informatiky budou minimální, avšak vyučovaná slovíčka a potřebná gramatika budou jiná. V následující části se autor zabývá praktickou stránkou věci, a to možnými aktivitami které jsou v těchto kurzech použitelné, zejména je kladen důraz na použití moderních technologií a také příprava na situace, které většinu studentů potkají v pracovních podmínkách.

Zaprvé je rozebrána možnost vedení dialogu, kde studenti musí improvizovat, vyvozovat závěry a učit se dešifrovat jim neznámou slovní zásobu v rámci kontextu, namísto přímé definice. Další je zmíněna možnost využití videa, jenž se stalo součástí každodenního života všech studentů. Tudiž využití videa v rámci vyučování pro ně může být vítaným osvěžením běžné výuky. Za použití videa se mohou studenti setkat s různými formami angličtiny, přízvuky a dialekty. Za další nespornou výhodu můžeme považovat, že si učitel může vybrat z široké rozmanitosti videí ať už to jsou videa autentická nebo připravená přesně pro účely výuky. Jako další varianta jsou představeny články z novin nebo časopisů. Tyto články jsou zejména vhodné pro rozšíření slovní zásoby a technických principů. Kapitola pokračuje zmíněním důležitosti vedení monologu pro budoucí profesní činnost studentů. Prezentace či vedení lekcí je užitečnou zkušeností pro studenty, nýbrž tuto schopnost využijí v profesionálním životě. Závěrem kapitoly jsou zmíněny návrhy jednoduchých aktivit, které mohou být v hodinách technické angličtiny použity.

Čtvrtá kapitola se zabývá přístupem k výuce technické angličtiny dvou učebnic od vydavatelů *Oxford University Press* a *Cambridge University Press*, kteří patří mezi přední vydavatele v tomto oboru. Knihy strukturou nápadně připomínají učebnice používané na středních školách od těchto vydavatelů. Z tohoto důvodu budou studenti již obeznámeni s principy, jak knihu využívat. Úvodem kapitoly jsou rozebrány názory akademiků, kteří se přou o použitelnosti takových učebnic v odborných anglických kurzech, kde ne vždy je učebnice postačující, a tak musí být doplněna učitelovými vhodnými materiály. Avšak učitel musí přesně vědět co mu daná učebnice může nabídnout a jaké materiály bude muset doplnit.

Kapitola pokračuje představením knihy *Cambridge English for Engineering*, která je součástí knižní série *Cambridge English for*. Tato série se zabývá vydáváním učebnic pro potřeby odborných anglických kurzů. Představení knihy začíná popisem struktury knihy. Postupně je analyzováno celé složení této knihy a jsou popsány kapitoly, které kniha nabízí. Za další je představena kniha *Oxford English for Careers: Technology 1* od vydavatele *Oxford University Press*. Tento vydavatel také nabízí knižní sérii pro potřeby anglických odborných kurzů stejně jako přechozí vydavatel. Dále jsou porovnána cvičení, která mohou být nalezena v jednotlivých učebnicích a jejich výhody a nevýhody. Závěrem kapitoly je souhrn učebnic a jejich doporučení a nedoporučení pro určité situace, také je zde uvedeno ve shodnosti s akademií, že ani jedna z učebnic nevyplní všechny potřebné aspekty pro výuku technické angličtiny na vysokých školách a vždy musí být doplněna externími materiály.

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